INSTALLATION GUIDE AND USER'S MANUAL

Fastlane Pool

ENDLESS POOLS®
SWIMMING MACHINES

Installation Instruction Booklet Information

Endless Pools, Inc. provides for every aspect of a Fastlane Pool project. This manual assists in the installation process, as well as the general maintenance of your Fastlane Pool.

Additional available resources including the Planning Guide and selected Supplemental Guides are available to you. These documents are available online at www.myendlesspool.com/downloads.html. In addition, we encourage installers to call our Customer Service Department at 800-910-2714 (US), 0800-520-0196 (UK) or 610-497-4538 (Direct) before beginning installation to register their projects and sign up for weekend technical support.

Please be advised that gloves and safety goggles should be worn during the installation of a Fastlane Pool.

Shipping regulations have dictated that the following chemicals cannot be shipped to Alaskan, Hawaiian, or International customers due to their hazardous nature: 4oz PVC cleaner, 4oz PVC Cement, 2 lb pH decreaser, and 1 lb bag of shock. If needed, these chemicals will have to be obtained locally.

Please take into consideration the following before proceeding:

If you have purchased the Optional Heater/Controller package, that will require a 3-wire (w/ neutral) 220v, 30 amp, GFCI power supply.

If you have purchased the standard package, then no neutral is required and the white wire can be left unused.

- The Submerged Suction Model #29-19 is certified only for use with Endless Pool Inc. Fastlane system. It may not be used in any other application.
- This Submerged Suction Model #29-19 may only be installed as described below.
- The Submerged Suction Model #29-19, is 19" in diameter and 29" long and is constructed of 316L perforated stainless steel. It should be replaced after 25 years using a Phillips head screwdriver. It shall be marked with the following label: NSF VGB 2008 SUBMERGED SUCTION 29-19. FOR USE ONLY WITH FASTLANE® SWIMMING MACHINE MANUFACTURED BY ENDLESS POOLS, INC. LIFE 25 YEARS, WALL ONLY. MAXIMUM FLOW FROM SINGLE 5 HP POWER UNIT WITH ALP2-16 GEAR PUMP PRESET TO MAXIMUM FLOW OF 4.8 GPM UTILIZING 16" DIAMETER OPEN FLOW PROPELLER. ENDLESS POOLS, INC. ASME A112.19.8-2008
- The Submerged Suction Model #29-19 does not require routine service during the year or as part of Endless Pool winterizing procedures. However, before using the Fastlane verify that the Submerged Suction Model #29-19 including the fasteners is undamaged and has not been tampered with.
- Do not use the Fastlane if there is any evidence of damage or tampering. Call the Endless Pools, Inc, Customer Service Department immediately. The Submerged Suction Model #29-19 must be secured as described below before the Fastlane is used again.
- Do not increase flow through the Submerged Suction Model #29-19 by increasing the size of the pump.
- Please Read and then keep these instructions for future reference.

Assembly Instructions

Note: all of the 316L stainless steel screws provided for the assembly of the Fastlane should be tightened to the recommended 25 in-lbs of torque.

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RECEIVING THE FASTLANE POOL

The Fastlane Pool is shipped via UPS and contains at least 16 packages. Additional packages may be sent depending on the options chosen:

(1) Hydraulic Power Unit
(Box labeled, "Power Unit Kit, 5Hp 60Hz, with Electronics, for Poolside WQS with 3/12/09 Card 451000" for US Customers and "Power Unit Kit, 5Hp 50Hz, with Electronics, for Poolside WQS with 3/12/09 Card 451020" for International Customers)

(1) 5 Gallon Hydraulic Fluid

(1) Fastlane Pool Swim Unit Housing
(Box labeled, "Fastlane Upper Unit for Rolled Perf Base, Sapphire 124016")

(1) Fastlane Pool Accessories Kit
(Box labeled Accessory Kit for Fastlane Pool w/ Rolled Perf Base, Sapphire 124026)
Qty 2 - Hydraulic Hose Protective Channels
Qty 1 - Acrylic Top for Swim Unit
Qty 1 - Acrylic Hanging Bracket
Qty 1 - Lower Standoff
Qty 1 - Owner's Manual Kit (Padded Envelope)
- Qty 1 - Owner's Manual
- Qty 2 - Hydraulic Adapters (8 Female JIC x 6 Male JIC)
- Qty 1 - Fastlane Pool Bonding Kit
- Qty 38 - 3/4" 10-32 Machine Screws
- Qty 10 - 1/2" 10-32 Machine Screws
- Qty 4 - Rubber Grommets
- Qty 6 - 10-32 nuts

(1) Fastlane Pool Swim Unit Base
(Box labeled Fastlane Lower Unit for Rolled Perf Base, Sapphire 124011)

(1) Fastlane Pool Liner Box (Only for a 9x13 Pool)
(Box labeled, "Fastlane Pool Liner Box, 9 x 13 157070")
Qty 1 - Pool Liner
Qty 2 - Vertical Struts
Qty 4 - Top Corner Tubes
Qty 4 - Bottom Corner Tubes

(1) Fastlane Pool Liner Box (Only for a 9x17 Pool)
(Box labeled, "Fastlane Pool Liner Box, 9 x 17 157072")
Qty 1 - Pool Liner
Qty 4 - Vertical Struts
Qty 4 - Top Corner Tubes
Qty 4 - Lower Corner Tubes
Qty 2 - 130cm Top Straight Tubes
Qty 2 - Straight Bottom Tubes

(1) Fastlane Pool Strut Box
(Box labeled, "Fastlane Pool Strut Box 157067")
Qty 8 - Vertical Struts

(2) Fastlane Pool Tube Box
(Box labeled, "Fastlane Pool Tube Box 157068")
Qty 3 - 130cm Top Straight Tubes
Qty 2 - 60cm Top Straight Tubes
Qty 3 - Straight Bottom Tubes

(1) Fastlane Pool Equipment Hutch
(Box labeled, "Hutch Box for Fastlane Pool Equipment 157064")
Qty 1 - Equipment Hutch
Qty 1 - Equipment Mounting Board
Qty 1 - Pump Mounting Clamp

(1) Fastlane Pool Water Quality System
(Box labeled: Fastlane Pool, Skimmer Plumbing and start-up Box with Teleweir Skimmer and Skimmer Housing [4302250])
Qty 1 - Skim-Filter
Qty 1 - Circulating Pump
Qty1 - Plumbing Parts bag
- Qty 2 - Thru-wall Fittings
- Qty 2 - MPT x Slip 90º Street Elbows
- Qty 2 - Slip x Slip Unions
- Qty 2 - Slip x Slip Ball Valves
- Qty 2 - Pump Unions with O-Rings
- Qty 1 - Male Slip x Female Slip 90º Street Elbow
- Qty 2 - MPT x Insert 90º Elbow
- Qty 2 - Plastic Hose Clamps
- Qty 2 - Threaded Plug with O-Ring
- Qty 1 - Eyeball Fitting
- Qty 1 - 4oz PVC Cleaner
- Qty 1 - 4oz PVC Cement
- Qty 1 - Teflon Tape
- Qty 1 - Liquid Tite Electrical Fitting
- Qty 1 - 1-1/2" Slip x 1-1/2" Slip x 3/4" FPT Tee
- Qty 1 - 3/4" Hose Spigot
- Qty 1 - 2" Male Slip x 1-1/2"FPT Bushing Reducer
- Qty 1 - Suction Fitting Assembly
- Qty 1 - Skimmer Straight Nut

Qty1 - Fastlane Pool Start Up Bag
- Qty 1 - Container of Test Strips
- Qty 1 - Water Clarifier
- Qty 1 - pH Increaser
- Qty 1 - pH Decreaser
- Qty 1 - Bag of Shock

Qty1 - Fastlane Pool Skim Filter Housing Assembly
- Qty 1 - Skim Filter Housing
- Qty 5 - 1/2" 10-32 Stainless Steel Machine Screws
- Qty 5 - 1" Self Tapping Stainless Steel Screws
- Qty 1 - 11/64" Drill Bit
- Qty 1 - 3' Length of Suction Hose

(1) 50' Roll of Flexible PVC

(1) Fastlane Pool Ladder

(1) Solar cover (only shipped if a Retractable Security Cover Kit was not ordered)

(1) Optional Heater Controller
(Box labeled, "Fastlane Pool Heater Kit, 60Hz 157073" for US Customers and, "International Fastlane Pool Heater Kit, 50Hz 157069" for International Customers)
Qty 1 - Heater Controller
Qty 1 - Keypad for Heater Controller
Qty 2 - Heater Tail Piece
Qty 2 - Heater Tail Piece T Gaskets
Qty 1 - Slip x Slip 90º Elbow
Qty 1 - Male Slip x Female Slip 90º Street Elbow
Qty 2 - 2-1/4" PVC Nipple
Qty 1 - 4-1/4" PVC Nipple
Qty 1 - Heater Controller Mounting Clamp
Qty 4 - 3/4" 10-32 Machine Screw
Qty 2 - 10-32 KEP Nut

POOL POSITIONING

To ensure ideal operation of the Fastlane Pool, consider the following steps when selecting a location for the pool.

- Look for an area that receives maximum sunlight for increased heat and extended use.
- Find a location with minimal wind exposure to minimize heat loss.
- Be aware of the amount of trees and shrubbery around the pool to limit the amount of debris that may accumulate in the pool.
- Select a location with accessibility to water and electric sources.
- Consider privacy when selecting a location.

SITE AND POOL PREPARATION

The surface that the Fastlane Pool is to be assembled on must be firm and level. The Fastlane Pool must be installed as level as possible, within 2"- 3" of level (from the highest point to the lowest point of the pool). If the pool will be assembled on a sloping surface, be sure to install the skimmer on the lower side to ensure that it will not draw air into the pump. If the ground is not level and it is desired to make a more level surface, take the earth from the high area of the uneven surface; do not add earth to the low area of the surface. Once the surface is level, clear any debris or sharp objects that may be uncomfortable to walk on or could become a puncture hazard for the liner. Foam flooring may be added under the liner for additional comfort.

The pool is comprised of various parts. Therefore, before proceeding with installation, ensure that all necessary parts for the pool are present and group like parts together (Fig 1).

Part Description	Quantity
(A) Liner	1
(B) Top 130cm straight tubes (wider)	6 (8 for Longer Pool)
(C) Top 60cm straight tubes (wider)	4
(D) Top corner tubes (wider)	4
(E) Bottom corner tubes (thinner)	4
(F) Straight bottom tubes (thinner)	6 (8 for Longer Pools)
(G) Struts	10 (12 for Longer Pools)

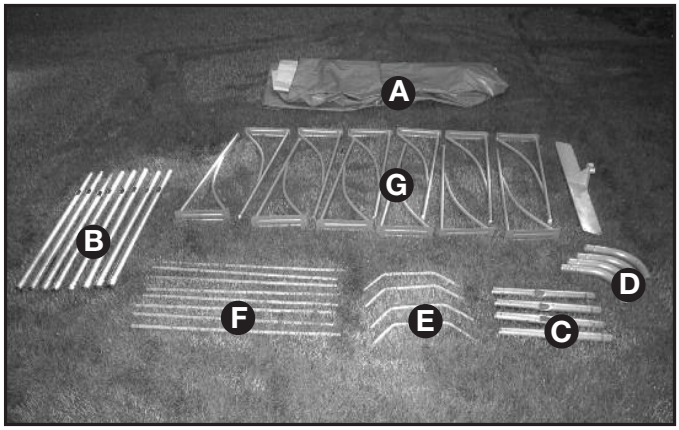


Fig. 1

The supporting legs, or struts (Part G), support much of the weight of the Fastlane Pool and may need additional support in "soft ground" installations, or in areas that may experience excess ground water. A 2"x 8" x 22" piece of lumber installed under each strut's base and leveled with the ground is very effective. Make sure the entire base of each strut is on the 2" x 8" lumber as any over-hang may result in bending of the strut. A concrete slab of the similar dimensions may be used as well. Please note that any support(s) added under the pool structure must be recessed so that the top of the support is level with the ground surface (Fig 2). Lifting the struts or frame in any manner may cause excessive stress on the liner and frame, and may void the Fastlane Pool warranty.

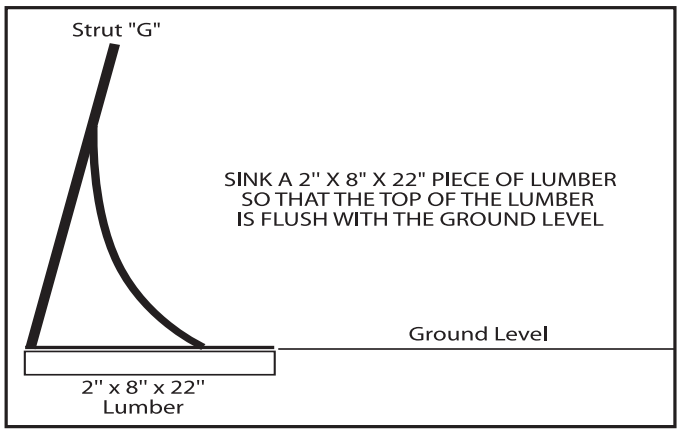

Strut "G"
SINK A 2" X 8" X 22" PIECE OF LUMBER
SO THAT THE TOP OF THE LUMBER
IS FLUSH WITH THE GROUND LEVEL
Ground Level
2" x 8" x 22"
Lumber

Fig. 2

Drainage needs to be provided around the pool and near the water quality equipment. It is important to be prepared in the unlikely event of a leak. If operating the Fastlane Pool indoors, it is ideal to install floor drains in the area around the pool's perimeter, but not directly under the pool. It is worth the time and effort now to install a drainage system rather than be unprepared in the event of a mishap.

POOL ASSEMBLY

1. Unfold and spread out liner (Part A) on the prepared area. NOTE: Keep in mind the desired "swim direction" when positioning the liner, because when the Fastlane Pool is fully assembled, the swim direction will be headed towards the end of the pool that has the pre-cut holes. These holes are for the water quality thru-wall fittings and hydraulic lines.
2. Align the struts (Part G) with the prepared cut outs at top of liner (Fig 3).

Fig. 3

3. Connect the bottom tubes (Part F) to the struts (Part G) one at a time to make the four sides of the pool (Fig 4). Connect corner tubes (Part E) to the open ends of both struts to finish each of the four corners. (Fig. 5).

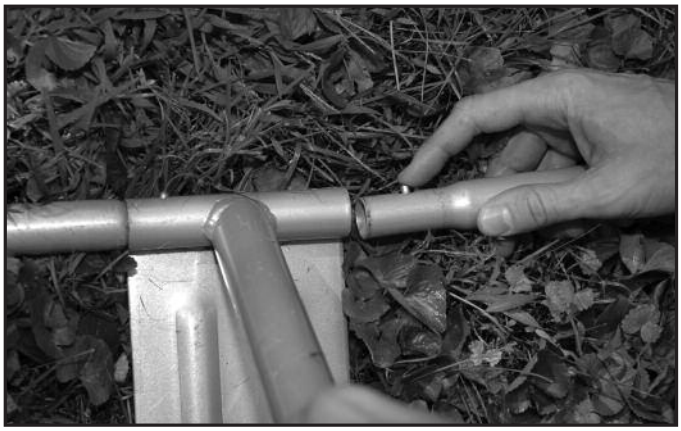


Fig. 4

Fig. 5

4. Connect the top tubes (Parts B and C) together. NOTE: The shorter tube (Part C) is always the last tube on the right when facing the pool wall (See Fig 6 and Fig 7).

DIAGRAM #2: WIDER STRAIGHT TUBE LAYOUT

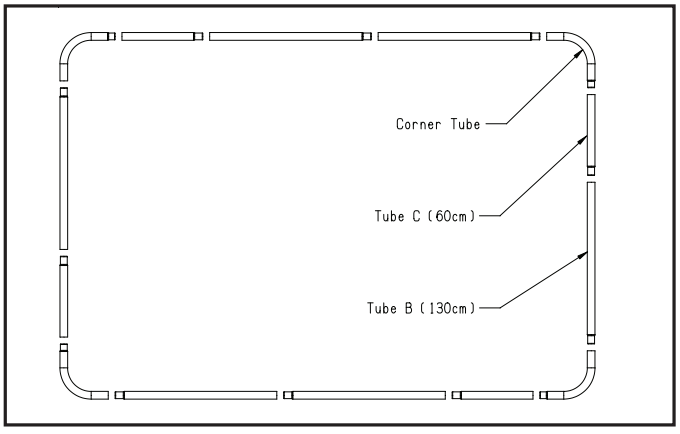


Fig. 6 - Standard (9' x 13') Fastlane Pool

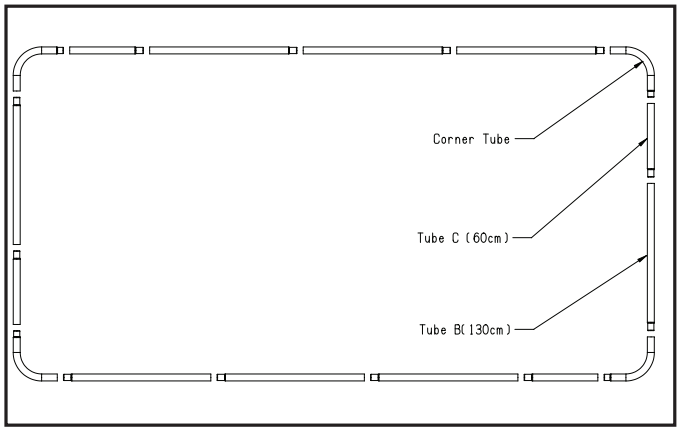


Fig. 7 - Longer (9' x 17') Fastlane Pool

5. Feed the connected top tubes (Parts B and C) into the corresponding sleeves of the liner (Fig 8). Be sure to align the top tube slots with the matching cutouts (Fig 9) in the liner, and then insert the corresponding struts (Part G) into the top tube slots (Fig 10).

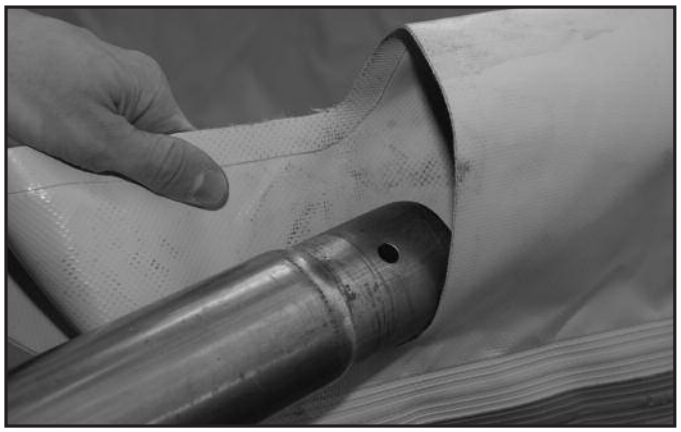


Fig. 8

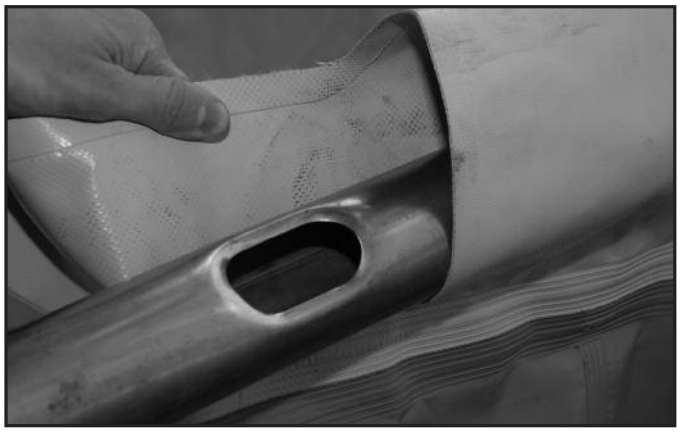


Fig. 9

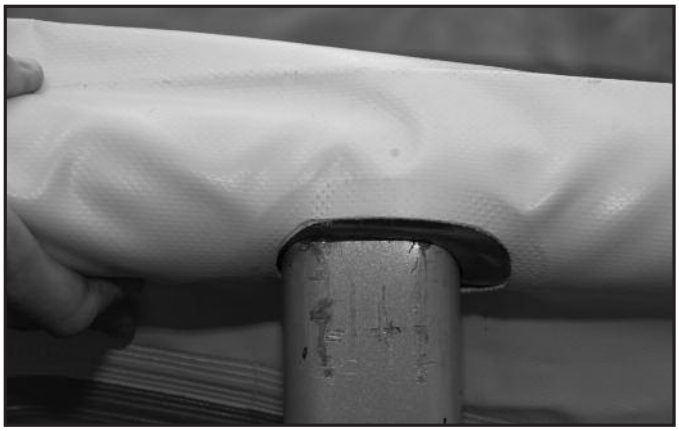


Fig. 10

6. Insert and connect the top corner tubes (Part D). It may be helpful to insert both ends of corner tube into the corresponding liner sleeves, and then pull back on the corner tube to connect one end at a time to the top rails (Parts B and C). There are no spring clips on the corner tubes (Fig 11).

Fig. 11

7. Ensure that all tubes around the perimeter are completely nested in one another and properly connected, and that no parts of the frame are racked or crooked. The liner should be hanging evenly from the top tubes.

8. Slowly begin to fill the pool with water until the bottom of the liner is almost taught. Remove any wrinkles in the pool liner at this time, as it will be difficult to do so once there are more than just a few inches of water in the pool.

9. To prevent leaking issues, it is very important to plumb and plug both thru walls before the water level reaches the two pre-cut holes in the liner. For more information, refer to the section in this Owners' Manual titled, THRU-WALL CONNECTIONS.

THRU-WALL CONNECTIONS

There are 2 thru-wall penetrations for you water quality system. There is a thru-wall fitting and a return thru-wall fitting. The provided fittings will come with 3 gaskets (2 rubber and 1 cork). Only two will be used in this application. One rubber gasket will be used on the inside of the pool and the cork gasket will be used on the outside of the pool. The following section will give a more detailed instruction for these thru-wall fittings.

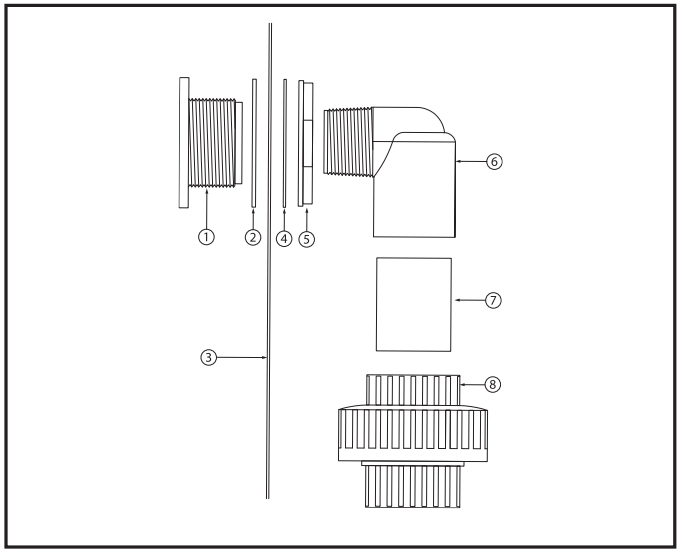


Fig. 12

Thru-Wall Installation

1. Place a rubber gasket (#2) onto the thru wall fitting (#1) and then insert the fitting into the hole in the liner (#3) from the inside of the pool. The threaded body of the fitting should be protruding outside the pool.

2. Place the paper/cork gasket (#4) onto the fitting outside the pool. Then thread the locknut (#5) onto the fitting. Do not over-tighten the fitting as this could cause the fitting to crack.

3. On the outside of the pool, attach the male thread x female slip 90º elbow (#6) to the thru-wall fitting. Make sure to apply Teflon tape to the threads of the elbow prior to attaching. The elbow should be facing down.

4. Cut off a short length of flexible PVC (approx. 2 1/2") (#7) from the large roll. Glue that short length of pipe into the elbow. Make sure that you apply PVC cleaner to both faces of the joint prior to gluing.

5. Then glue the slip x slip union (#8) onto that short length of pipe. The union should be disassembled prior to gluing so that the union pieces are not glued to themselves.

6. The remaining flexible PVC will be used to connect the plumbing assemblies at the pool to the Water Quality System. The skimmer thru-wall will be on the right and the return thru-wall will be on the left (as you are in the pool facing the thru-wall penetrations). The skimmer thru-wall assembly should be connected to the suction side of the pump and the return assembly should be connected to the pressure side of the pump (or to the optional heater). The Water Quality System should be completely assembled prior to running the flexible PVC lines.

SKIMMER ASSEMBLY

1. Unthread the locking ring from the body of the skimmer-filter

2. Place the skimmer-filter into the opening in the top of the housing. There are two openings in the bottom of the skimmer-filter. Make sure that the opening labeled, “IN” is facing one of the side panels of the housing. Re-install the locking ring onto the skimmer-filter.

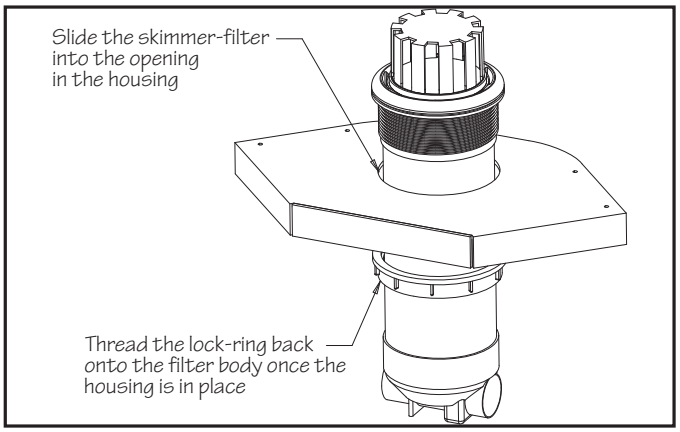

Slide the skimmer-filter into the opening in the housing
Thread the lock-ring back onto the filter body once the housing is in place

Fig. 13

3. Use the provided PVC cement and cleaner to glue the 2” male slip x 1-1/2” FPT bushing reducer into the, “OUT” port of the skimmer-filter.

4. Wrap Teflon tape around the threads of one of the 1-1/2” MPT x Insert 90º elbows. Thread that elbow into the bushing reducer that was installed in the previous step. Make sure that the elbow is facing down.

5. Use the provided PVC glue and cleaner to secure the skimmer straight nut into the “IN” port at the bottom of the skimmer-filter. Thread in the suction fitting assembly into the adapter.

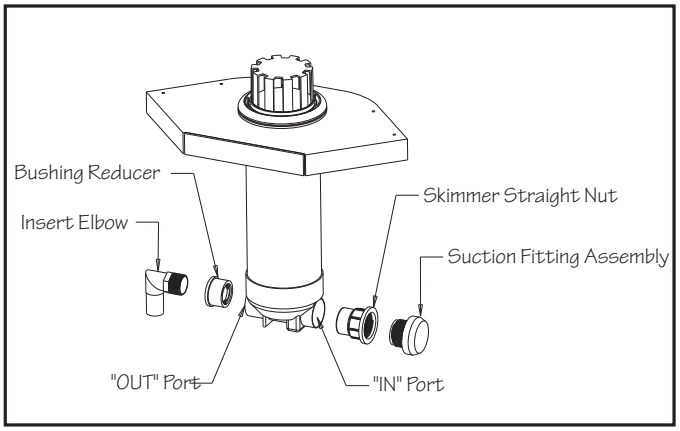


Fig. 14

6. Attach the hanging brackets to the skimmer-filter housing. Position the smaller face of the bracket onto the underside of the housing so that the pre-drilled holes are aligned. Use the provided stainless steel screws to attach.

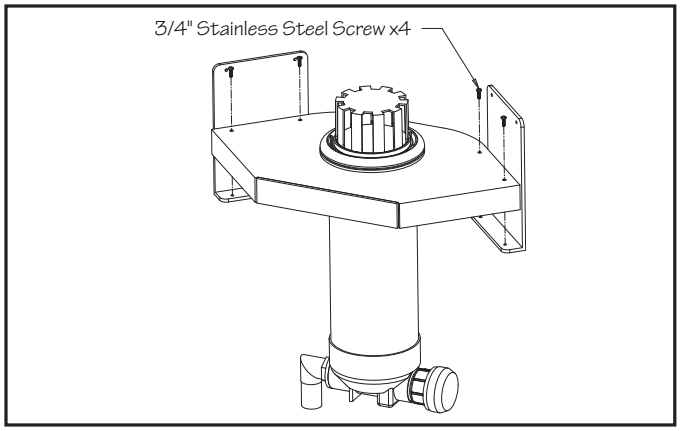


Fig. 15

7. Once the skimmer-filter assembly is complete, place it inside the pool in the same corner as the lower thru-wall fitting (front right).

8. Use the provided drill bit and self-tapping screw to attach the skimmer assembly to the top tube of the pool. Position the holes in the top of the bracket with the center of the top tube. Drill through the liner and tube with the provided drill bit ant then secure the assembly to the top tubes with the provided self-tapping screws.

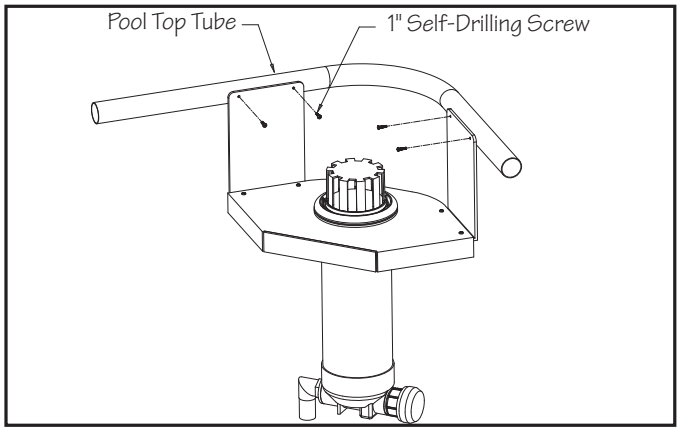


Fig. 16

SKIMMER-FILTER AND RETURN CONNECTIONS

There are two thru-wall fittings installed in your pool (See the section entitled, “Thru-Wall Connections”). The right thru-wall fitting (as you are in the pool facing the front) is the suction fitting and the left thru-wall fitting is the return fitting.

1. Wrap Teflon tape around the threads of the remaining 1-1/2” MPT x Insert 90º elbow and secure that to suction thru-wall fitting (front right) so that the elbow is facing down.

2. Loosely place a plastic hose clamp on each end of the flexible hose (packaged in the skimmer-filter housing box). Place one end on the elbow attached to the skimmer-filter and the other end onto the elbow attached to the suction thru-wall fitting. Then tighten the plastic hose clamps.

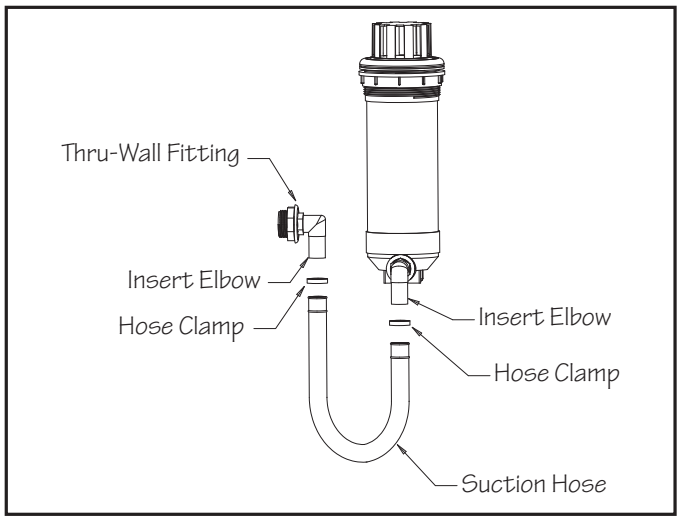


Fig. 18

Return Connection

1. A directional eyeball fitting has been provided with the Water Quality System. This eyeball fitting is to be secured to the return thru-wall fitting (front left). For optimal heating of the pool, make sure that the opening in the eyeball fitting is pointing down.

FASTLANE SWIM UNIT ASSEMBLY

1. Carefully unpack the swim unit from its boxes. Make sure to remove any hardware packs from the boxes as well. The packaging can be collapsed and used as a protective surface upon which to assemble the Fastlane. The foam packing material can be used to wedge under the base to prevent it from tipping over.

2. Take care when handling or working with any of the stainless steel components of the swim unit. The ends can be sharp. The first step is to remove the two circular end caps from each side of the cylindrical base. There are 3 arced cover strips around the perimeter of the end cap. Unthread the nine screws that secure the cover strips (3 screws per cover strip). Repeat this step for the other side of the stainless steel base. Carefully set each end cap aside (Fig 19).

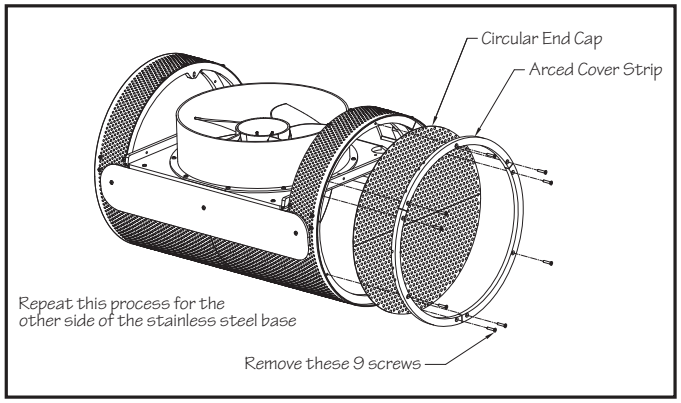

Circular End Cap
Arced Cover Strip
Repeat this process for the
other side of the stainless steel base
Remove these 9 screws

Fig. 19

3. Uncoil the two lengths of hydraulic hose that are attached to the cylindrical base. Make sure that the hoses are seated into their respective notches in the backside of the base (Fig 20).

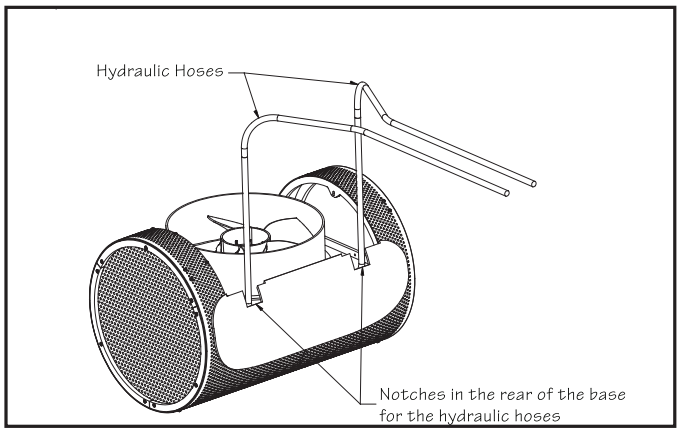


Fig. 20

4. Remove the throat from the upper housing. There are two screws on each side of the throat. Pull the throat off of the housing and set it aside. Pull the vertical water-conditioning grill up and out of the housing. Pull the horizontal grill out of its track and remove from the housing. Make sure to remove and discard the wood 2x4 spacer from the bottom of the housing before proceeding (Fig 21).

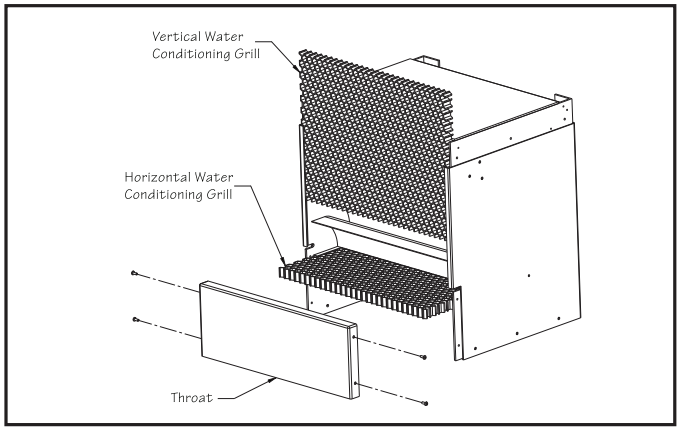


Fig. 21

5. Carefully remove the protective film encasing the upper housing. Place the upper housing into the opening of the cylindrical base (Fig 22). The hydraulic hoses connected to the base should be aligned with the back of the upper housing. Make sure that the stainless steel bonding wire attached to the motor mount is positioned inside of the upper housing.

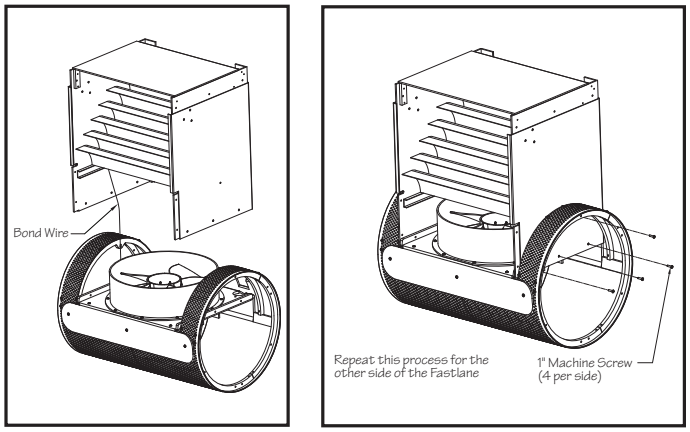


Fig. 22

6. Use the provided stainless steel machine screws to attach the upper housing to the base. There will be 4 screws per side (total of 8). On each side of the housing, there will be 3 screws securing the upper housing to PVC motor mount support and 1 screw attaching the stainless steel reinforcing support to the housing just above the 3 previous screws (Fig 22).

7. Carefully lay the Fastlane onto its front face. Run the hydraulic hoses up the back of the upper housing. The two hat channels will be placed over the hydraulic hoses. Make sure that the mounting hole in the end of the hat channel is facing up and that the bottom of the hat channel has been inserted into the notch in the cylindrical base. Use the provided 3/4" machine screws to attach the hat channels to the upper housing. There will be eight screws per hat channel (Fig 23).

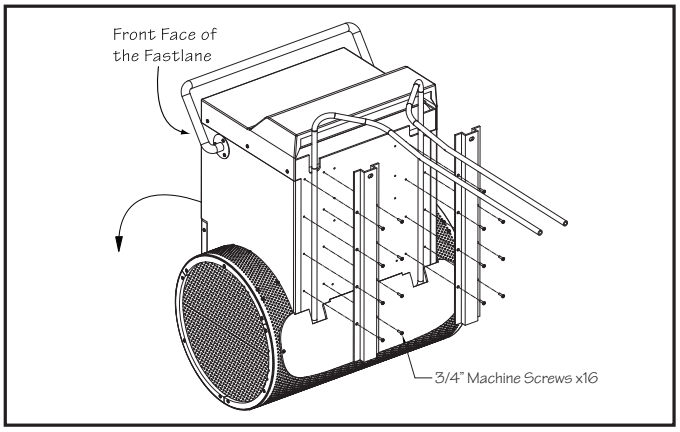


Fig. 23

8. Pull any excess hose out of the hat channel (Fig 24).

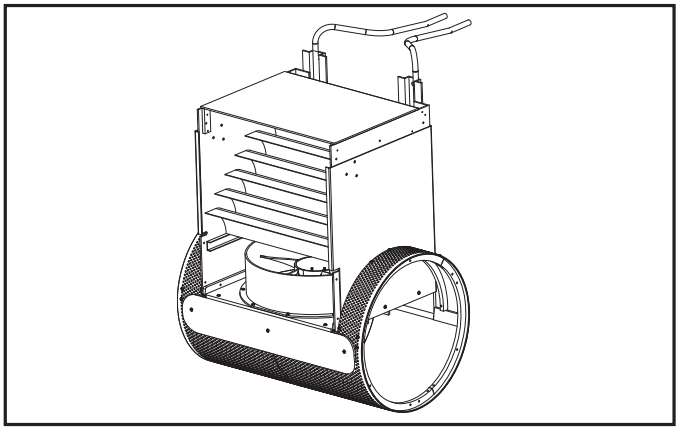


Fig. 24

9. Slide the horizontal water-conditioning grill back into its track inside the housing. The horizontal grill is the wider of the two grills (Fig 25).

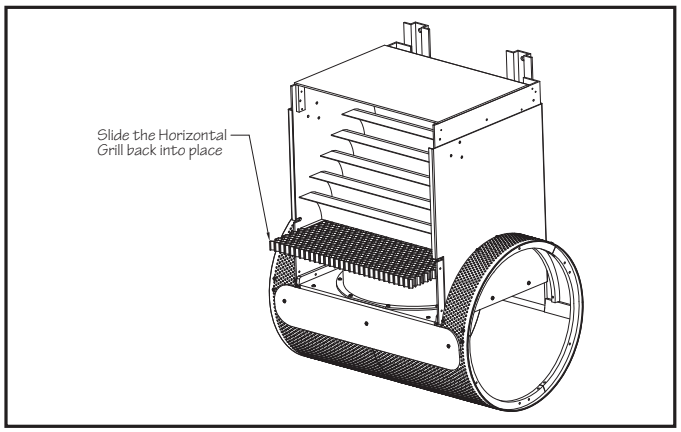


Fig. 25

10. Install the stainless steel grab bar to the upper housing using the provided machine screws and lock nuts. Feed the stainless steel wire attached to the motor mount up through the horizontal grill. Then feed the wire up between two of the turning vanes. Place the stainless steel wire (from the motor mount in the base) around the bottom screw on the left side before tightening down on the nut. Place the second stainless steel wire (that exits the top rear of the upper housing) around another screw before tightening down on the nut (Fig 26).

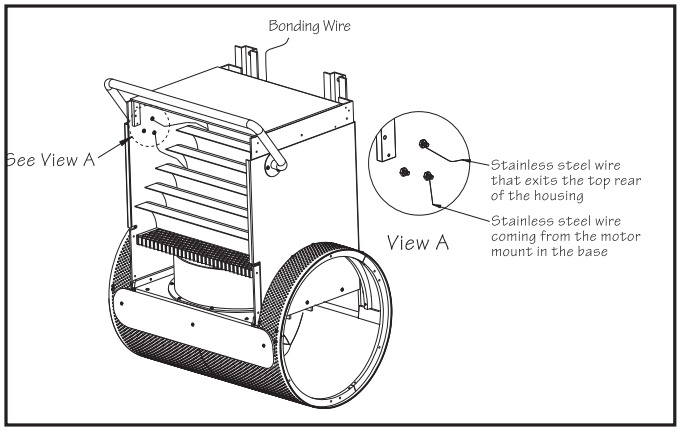


Fig. 26

11. Reattach the throat (removed in step 4) to the upper housing. Again, there will be 2 screws on either side of the throat (total of 4) (Fig 27).

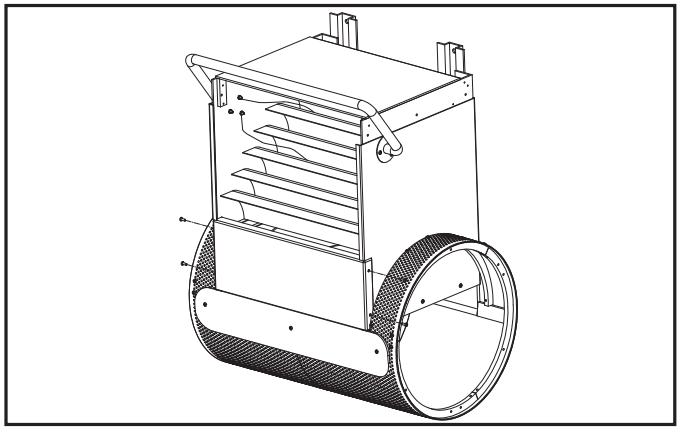


Fig. 27

13. Slide the vertical water-conditioning grill back down into the housing (Fig 28).

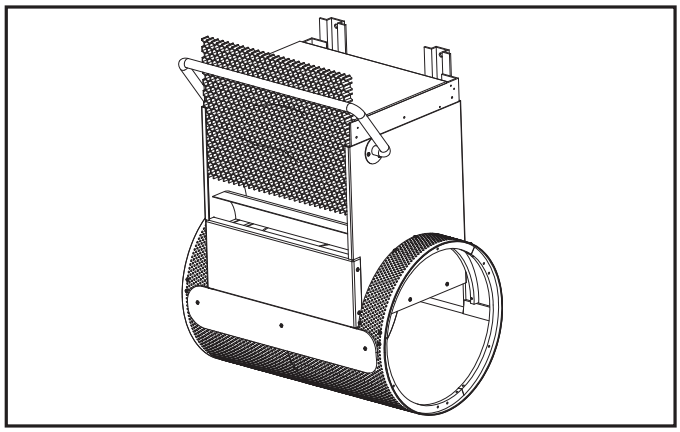


Fig. 28

14. Re-install the circular end caps. Make sure that the "smooth" surface of the end caps are facing out. Align the end caps to the internal PVC supports so that the holes in the internal supports are aligned with holes in the end caps. Position the arced cover strips over the end caps, making sure to align the hole in the arced cover strips with the holes in the stainless end caps and the internal PVC supports. Install the nine screws (3 per cover strip) that were removed in step 2. Repeat for the remaining end cap (Fig 29).

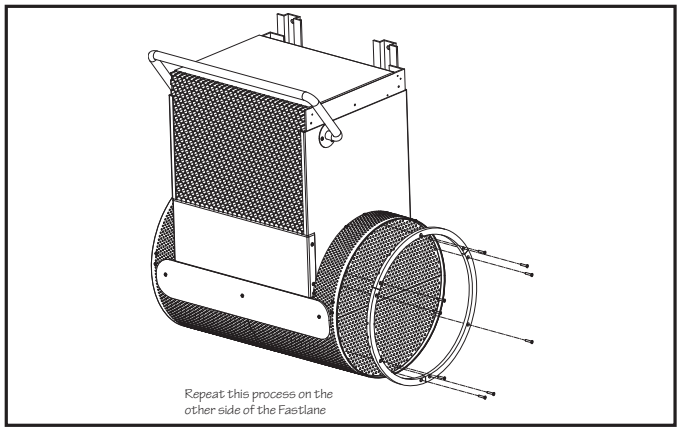


Fig. 29

15. Secure the Fastlane hanging bracket to the back of the Fastlane with the provided 3/4" Machine Screws. The top pair of screw holes in the back of the Fastlane should be aligned with the holes that are second from the top of the bracket. Additional holes have been placed in the bracket should be level of the Fastlane need to be adjusted. An additional lower standoff has been provided if the Fastlane is not hanging evenly in the pool (Fig 30).

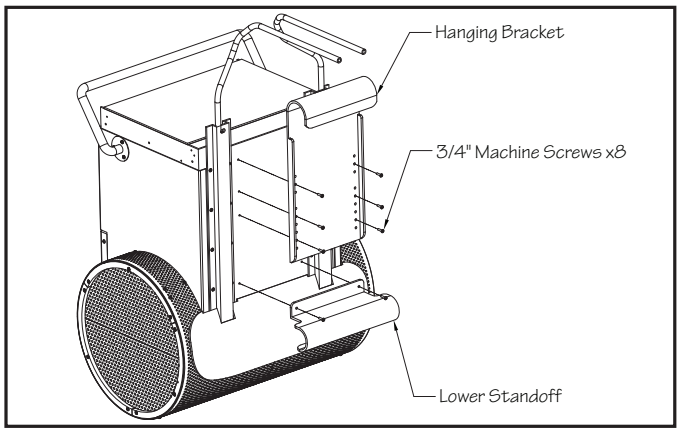


Fig. 30

16. Once the pool is nearly full and the liner is taught and wrinkle-free, carefully lift the assembled Fastlane Swim Unit into the pool at the skimmer end. Lower and position the Swim Unit so that the acrylic hanger "clips" on to the top straight tube (Part B). The Swim Unit should be centered along the end of the pool.

17. The hydraulic hoses and bond wire can be simply left hanging over the top of the pool wall to run back to the Power Unit, or they can be fed through the pool wall as described in Steps 18 & 19.

(NOTE: Steps 18 & 19 are optional, skip to Step 20 if choosing not to feed hoses through the pool wall)

18. If a more finished look is desired, four rubber grommets have been provided to fit into holes that can be cut into the top white section of the liner. Once the Fastlane Swim Unit has been properly placed in the pool and is centered along the width of the pool, locate the holes through which the hydraulic lines will run. Using a permanent marker (while outside the pool and along the exposed side of the acrylic hanger), dot the liner with two marks, each being 1-1/2" away from the vertical edges of the hanger (away from center) and 3" down from the top of the pool. Place a rubber grommet over the marks so that they are centered in the grommet openings. Trace the INSIDE of the grommets onto the liner. Using a utility knife with a sharp blade, SLOWLY and CAREFULLY cut out the traced circles. NOTE: Cutting small curves or a circle with a utility knife can be difficult. It may be best to work in many small straight cuts for accuracy.

19. Push the grommets into the holes so that the fabric edges tuck inside the grooves of the grommets. Repeat this process again for two more holes inside the pool. NOTE: When complete, the hydraulic hoses and bonding wire will be passing through two layers of fabric. It is important to feed the hydraulic hoses and bonding wire through both grommets, starting from inside the pool and then feeding them through the outer layer of fabric.

20. Run the hydraulic hoses back to the Hydraulic Power Unit. Using the provided bonding lug and self-drilling / self-tapping screw, fasten the bonding lug to the vertical strut that is closest to the Fastlane. Attach the bond wire from the Fastlaen to the Bonding lug. To bond the Fastlane Swim Unit and Fastlane Pool structure to the rest of the pool equipment, run a #8 AWG bare copper wire from the bonding lug (that was just attached) to the rest of the Water Quality System equipment and Hydraulic Power Unit. Always be sure to verify any additional bonding requirements that may be dictated by local codes and ordinances.

21. Once the Fastlane is installed in the pool, place the housing lid onto the housing and use the provided screws to attach. There will be three screws per side, for a total of six (Fig 31).

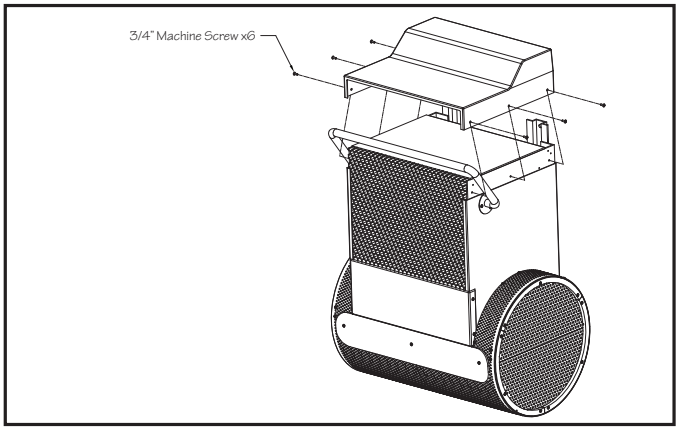


Fig. 31

FASTLANE HYDRAULIC POWER UNIT ASSEMBLY

The power unit should be placed on a flat and level surface. Whether placed indoors or outdoors, this is an air-cooled unit and must have ample ventilation. Therefore, a minimum of 12" of air spaced must be provided on all sides of the power unit. In addition, the power unit needs to be check periodically for maintenance and should be accessible.

Take care when placing the power unit as it is heavy.

Once the power unit is in place, connect the hydraulic hoses. The high-pressure hose gets connected to the fitting on the high-pressure manifold (blue box). The low-pressure hose, which will have red tape, gets connected to the fitting on the black fill cap (Fig 32)

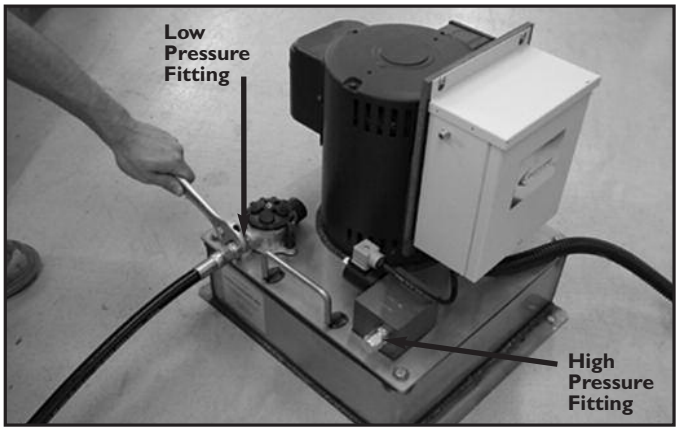


Fig. 32

Make sure that the power is turned off to the power unit. Remove the fill black fill cap and remove the oil filter by lifting it out of fill opening. Use the provided paper funnels and fill the reservoir to within 2" of the top. Endless Pools, Inc. supplies a special non-petroleum fluid created for this application and this equipment. Do not use a substitute hydraulic fluid. Extra hydraulic fluid is provided for longer hose runs. Any excess fluid should be retained for future use.

Once filled, replace the oil filter and ensure that it is seated properly before putting the fill cap back on. If you have selected a longer run hose, we have provided extra fluid. In this case, turn the unit on and let it run for one minute to fill the run hoses. Turn the power off, remove the fill cap and oil filter, and add fluid as needed. Again, you want to fill the reservoir to within 2" of the top.

The Water Quality System circulating pump and optional heater controller will be secured to the power unit. An equipment hutch has been provided to protect this equipment from the elements. **The heater controller mounting board must be attached to the power unit even if the optional heater controller has not been purchased.** (See Assembling the WQS with Heater Controller) This mounting board will be used to help secure the equipment hutch to the power unit.

ASSEMBLING THE WATER QUALITY SYSTEM WITHOUT HEATER CONTROLLER

1. Loosely attach the circulating pump to the power unit. The pump will be attached to the handle of the power unit on the same side as the hydraulic connections. Place the circulating pump on to the power unit so that the suction of the circulating pump is facing away from the power unit (Fig 33).

2. Place the pump foot clamp on the underside of the power unit handle, aligning the holes in the pump foot clamp to the holes in the pump foot. The pump foot clamp is packaged with the Water Quality System Equipment Hutch. Use the provided screws to clamp the pump on the power unit handle.

3. Attach the pump union nuts to both fittings of the pump. Make sure that the o-rings are in place before attaching the union fittings.

4. Glue a male slip x female slip street elbow into the pressure fitting of the pump so that it is facing away from the power unit. Apply PVC cleaner to both faces of the joint prior to gluing for every glue joint.

5. Cut three 2-1/2" lengths of flexible PVC off of the 50' roll of flexible PVC that was provided.

6. Glue one of these lengths into the union fitting connected to the suction side of the pump.

7. Glue another length of 2-1/2" PVC into the elbow that is connected to the pressure union.

8. Glue the provided Tee onto the pipe coming out of the street elbow so that the 3/4" female pipe thread of the Tee is facing up. Apply Teflon tape to the threads of the hose spigot and secure it to the Tee.

9. Glue the third 2-1/2" length of PVC into the other side of the Tee.

10. Glue a ball valve onto the pipes that are protruding from the suction union of the pump and the Tee on the pressure side of the pump (Fig 33).

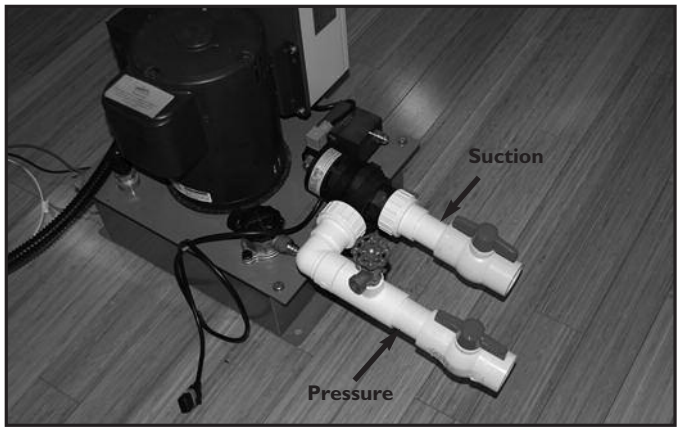


Fig. 33

11. Cut the 50' length down to the appropriate lengths to connect the suction side of the pump to the union at the skimmer thru-wall assembly and connect the pressure side of the pump to the union at the return thru-wall assembly.

ASSEMBLING THE WATER QUALITY SYSTEM WITH HEATER CONTROLLER

Note: Additional PVC fittings can be found in the Heater Controller box.

1. Loosely attach the circulating pump to the power unit. The pump will be attached to the handle of the power unit on the same side as the hydraulic connections. Place the circulating pump onto the power unit so that the suction of the circulating pump is facing away from the power unit (Fig 34).

2. Place the pump foot clamp onto the underside of the power unit handle, aligning the holes in the pump foot clamp to holes in the pump foot. The pump foot clamp is packaged with the equipment hutch box. Use the provided screws to clamp the pump to the power unit handle.

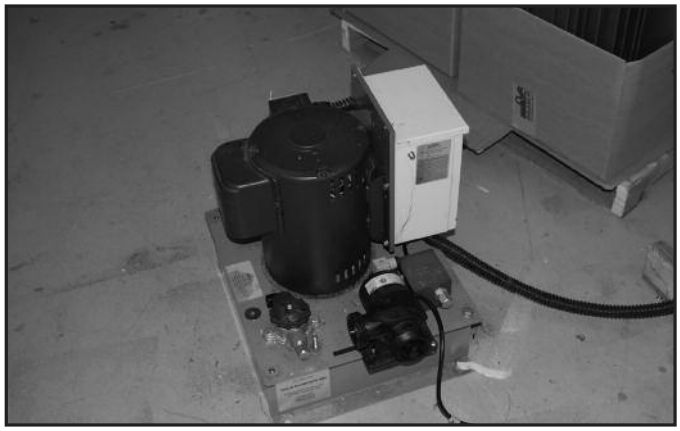


Fig. 34

3. Next remove the two reservoir mounting bolts on the side opposite the power unit controller. Align the holes in the heater controller mounting board with the holes in the power unit that were just removed. The mounting board is packaged with the Water Quality System equipment hutch box. The two pieces of the mounting board will have to be assembled as shown. Replace the bolts and tighten securely (Fig 35).

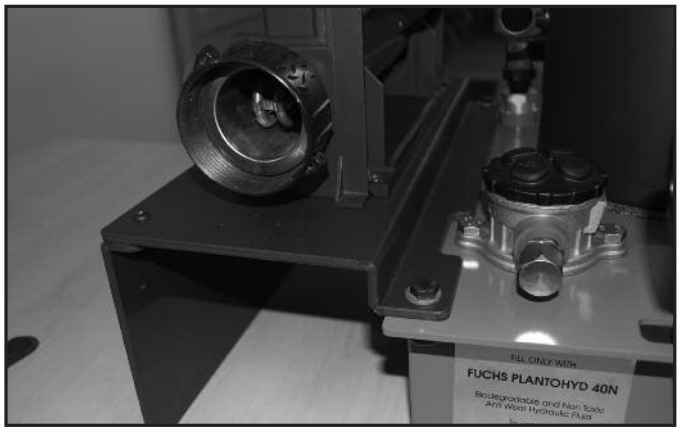


Fig. 35

4. Place the heater controller-mounting clamp onto the mounting board so that it is aligned with the holes closest to the power unit. The tabs of the mounting clamp should be facing away from the power unit. There should also be a gap between the tab and the spacer. Use the provided hardware to attach the mounting clamp to the mounting board. DO NOT install screws into the front holes at this time.

5. Slide the heater controller into position, so that the plug-in ports are facing away from the power unit and the feet of the heater controller are seated firmly under the mounting clamp. Once the heater controller is in place, use the provided nut and machine screws to attach the front of the heater controller to the mounting board (Fig 36).

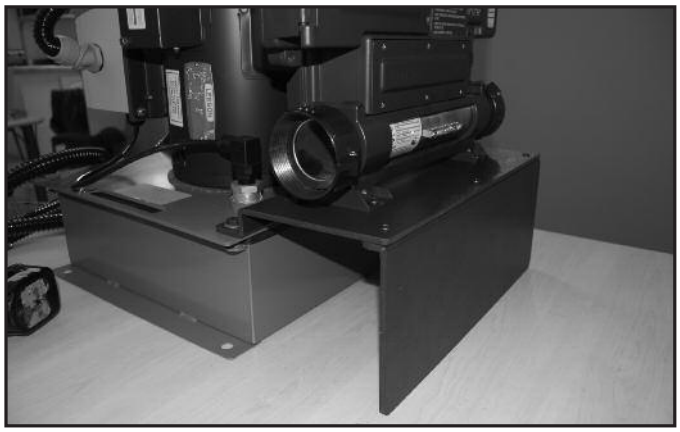


Fig. 36

6. Pre-cut lengths of PVC have been provided. Apply PVC cleaner to both faces of the joint prior to gluing for every glue joint.

7. Glue a 2-1/4" length of pipe onto each end of the provided Tee.

8. Position the 3/4" female pipe thread portion of the Tee so that it is facing out away (horizontally) from the power unit. On the right side of the Tee, glue the pump union onto the pipe (make sure that the pump union nut is in place prior to gluing) (Fig 37).

9. On the left side of the Tee, glue the female end of a male slip x female slip elbow (street elbow) onto the pipe.

10. Glue a heater controller union half onto the male end of the street elbow.

11. Once this assembly has been glued together, connect the pump to the heater controller. Make sure that there is an o-ring between the pump union and the pump discharge and there is a T-Gasket between the heater controller union nut and the union half.

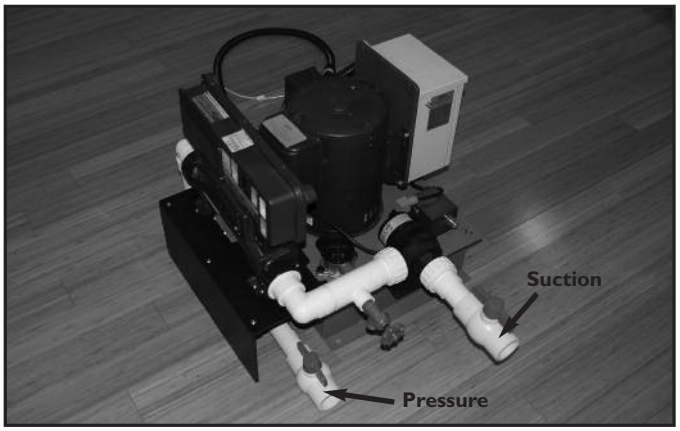


Fig. 37

12. Take the 4-1/4" length of PVC and glue a slip x slip 90º elbow onto one end. At the other end of this pipe another street elbow will be glued on, but the 2 faces of the elbows must be aligned. This can be accomplished by placing both faces of the elbows onto level ground immediately after the second elbow has been glued on. This will force the elbows to be facing the same way.

13. Take this assembly and glue a heater controller union half onto the male end of the street elbow. Connect the union half to the heater controller so that the slip x slip elbow is down and facing under the mounting board (Fig 38).

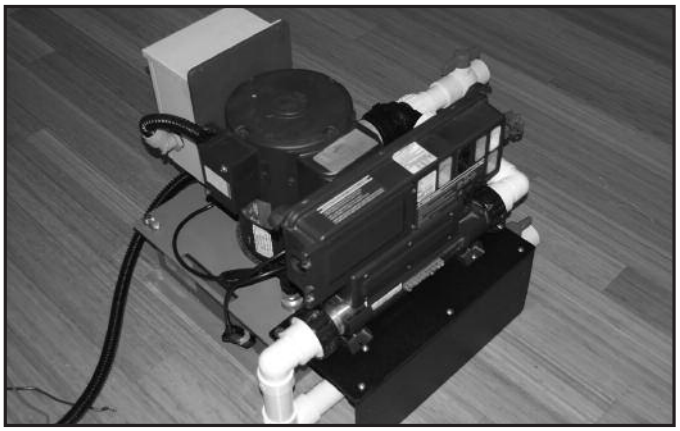


Fig. 38

14. Cut a length of flex PVC from the roll so that when glued into the slip x slip elbow the opposite end of the pipe is just beyond the base. Then glue a ball valve onto the end of that pipe (Fig 37).

15. Use the flexible pipe to connect the ball valve to the return fitting union on the pool.

16. Cut a 2-1/2" length of flexible PVC and glue that into the suction fitting on the pump. Glue a ball valve onto that short piece of pipe. Then glue a length of PVC between that valve and the suction fitting on the pool (Fig 37).

ELECTRICAL REQUIREMENTS AND CONNECTIONS (60Hz)

The following is for the U.S. and countries with a similar power supply.

Consider the electrical requirements for the specific installation before locating the Water Quality System and gluing the plumbing parts. Different option packages require different plumbing and electrical configurations.

Standard Fastlane Pool package with no heater
A licensed electrician should make all electrical connections. The standard package will require a two-wire (plus ground) 220 volt 30 amp GFCI Power Supply. An electrical whip is going to be pre-wired into the LINE side of the contractor in the controller, which will then need to be connected to the incoming power supply. The white wire in the whip will be unused in this application.

Please refer to the following step-by-step instruction for supplying power to the circulating pump. Wiring diagrams are available at the back of this book.

1. Cut the plug off of the cord, then strip back and expose the 3 wires.

2. Remove one of the unused 1/2" knockouts in the bottom of the Controller Box that is attached to the Hydraulic Power Unit. Slide the liquid tight fitting over the cord of the WQS pump with the compression nut end first. With the liquid tight fitting still loose on the cord, push the threaded end of the fitting into the hole in the Controller Box and determine the length of cord that will need to be fed into the box.

3. When the correct length is determined, tighten the compression nut on the cord. Then feed the locknut over the cord and thread the locknut onto the fitting to securely affix it to the Controller Box.

4. On the contactor located inside the Controller Box, attach the WQS pump's cord to the LOAD side of the contactor. The black wire goes to terminal R1, the white wire goes to terminal R3, and the green wire goes to the ground bus bar on the bottom of the Controller Box.

Fastlane Pool package w/ Optional Heater Controller
A licensed electrician should make all electrical connections. This option will require a three-wire (plus ground) 220 volt 30 amp GFCI Power Supply. An electrical whip is going to be pre-wired into the LINE side of the contractor in the controller, which will then need to be connected to the incoming power supply. The white wire will need to be connected to the load neutral of the 30amp GFCI breaker (the neutral pigtail needs to be connected to the neutral bus bar inside your breaker panel). An electrical whip will be provided with the heater controller which must be wired into the contactor as well. The WQS pump and heater controller will only run when the swim current is not in use, but the keypad will always have power.

Please refer to the following step-by-step instruction for supplying power to the heater controller. Wiring diagrams are available at the back of this book.

1. Power is supplied to the system by connecting the existing whip on the power unit control box to the shut off installed by your electrician.

2. Connect the whip, provided with the heater controller, between the unused knockout in the power unit controller and the knockout in the top left of the heater controller.

3. Inside the heater controller, connect the black wire to terminal L1, connect the red wire to terminal L2, connect the white wire to terminal N, and connect the green to terminal G. All four terminals will be color-coded.

4. Inside the power unit controller, connect the four wires coming from the heater controller to the contactor as follows: connect the black wire to terminal R2 (top left), connect the red wire to terminal R3 (bottom right), connect the green wire to the ground bus bar at the bottom of the control box, and connect the white wire to the other white wire that is coming from the incoming power supply.

5. Plug the circulating pump into the CP port on the heater controller.

Fastlane Pool Package with optional 55,000 BTU Gas or Propane Heaters
A licensed electrician should make all electrical connections. This package will require a two-wire (plus ground) 220 volt 30 amp GFCI Power Supply. An electrical whip is going to be pre-wired into the LINE side of the contactor in the controller, which will then need to be connected to the incoming power supply. The white wire in the long whip will be unused in this application. Power will be supplied for both the circulating pump and the heater from the LOAD side of the contactor in the power unit controller. Endless Pools does not provide an electrical connection between the power unit and the heater; these need to be provided locally. In this application, the heater and circulating pump will be shut off when the swim current is on.

Please refer to the following step-by-step instruction for supplying power to the heater and circulating pump:

1. A two-wire 18AWG (plus ground) minimum connection will need to be made between the power unit controller and the heater.

2. Inside the power unit controller, connect the one wire to terminal R1, connect the other wire to terminal R3, and connect the ground wire to the bus bar at the bottom of the controller.

3. The other end of this connection must terminate inside a junction box that is attached to the electrical knockout of the heater.

4. Make sure that the heater's transformer is wired for 220 volts. See the heater's owner's manual for more information.

5. Cut off the plug off of the circulating pump cord, expose the three wires inside and strip back each individual wire. Have this cord terminate inside the junction box that was connected to the heater in step 3.

6. Under one wire nut, connect all 3 ground wires (green) from the heater, the pump, and the connection from the power unit controller.

7. Under one wire nut, connect one leg of the incoming power to one of the wires from the heater and one of the wires from the pump. Under another wire nut connect the three remaining wires.

ELECTRICAL REQUIREMENTS (50Hz)

The following is for the UK and countries with a similar power supply.

Fastlane Pool without Heater Wiring Instructions
A licensed electrician should make all electrical connections. The standard package will require a two-wire (plus ground) 220 volt 30 amp RCD Power Supply. The power unit controller may have to be attached to the power unit. If not done so already, connect the controller as directed. There are two electrical whips attached to the controller. The shorter one needs to be connected to the power unit motor. The longer whip must be pre-wired into the LINE side of the contactor in the controller, which will then need to be connected to the incoming power supply. The white wire in the long whip will be unused in this application.

Please refer to the following step-by-step instruction for supplying power to the circulating pump. Wiring diagrams are available at the back of this book.

1. Cut the plug off of the cord, then strip back and expose the 3 wires.

2. Remove one of the unused 1/2" knockouts in the bottom of the Controller Box that is attached to the Hydraulic Power Unit. Slide the liquid tight fitting over the cord of the WQS pump with the compression nut end first. With the liquid tight fitting still loose on the cord, push the threaded end of the fitting into the hole in the Controller Box and determine the length of cord that will need to be fed into the box.

3. When the correct length is determined, tighten the compression nut on the cord. Then feed the locknut over the cord and thread the locknut onto the fitting to securely affix it to the Controller Box.

4. On the contactor located inside the Controller Box, attach the WQS pump's cord to the LOAD side of the contactor. The black wire goes to terminal R1, the white wire goes to terminal R3, and the green wire goes to the ground bus bar on the bottom of the Controller Box.

Fastlane Pool with Heater Wiring Instructions
Wiring diagrams are available at the back of this book.

Two 220v 30amp RCD rated circuits are required when the optional electric heater has been selected. A minimum of 10AWG wire should be used for all field wiring. All connections should be made by a licensed electrician.

We recommend that you have your electrician install two shutoffs within 5' of where you intend to place your power unit and water quality system. These shutoffs can be installed prior to your pool being delivered. Please consult all appropriate national and local codes.

The power unit controller may have to be attached to the power unit. If not done so already, connect the controller as directed. There are two electrical whips attached to the controller. The shorter one needs to be connected to the power unit motor. The longer whip must be pre-wired into the LINE side of the contractor in the controller, which will then need to be connected to the incoming power supply. Power to the heater controller is supplied by the second shut off and the heater-controller through the appropriate knockouts in these respective units. Inside the heater-controller, connect your live wire to terminal L1 (leaving the jumper wire between L1 and L2 in place), connect your neutral to terminal N, and connect your earth to terminal G. The circulating pump gets plugged into the green terminal labeled CP on the heater controller.

BONDING AND GROUNDING

All of the electrical equipment that we supply is UL or CSA approved and must be installed in accordance with local electric codes by a licensed local electrician. Bonding and Grounding is an important part of that process. All electrical components have bonding lugs and should be bonded together and to the steel pool frame. A bonding conductor shall be solid copper not smaller than 8 AWG and may be insulated, covered or bare. If new construction is involved where reinforcing rods are installed in the concrete under or adjacent to the pool this should be included in the bonding circuit. Each of the pieces of equipment should be separately grounded.

A #8AWG bare copper wire is required for all bonding connections. Connect this wire to your power unit and heater-controller (if purchased). This wire should then connect to the bonding lug that was connected to the vertical strut at the front of the pool (see step 20 of the section called, “Fastlane Swim Unit Assembly”).

FASTLANE POOL EQUIPMENT HUTCH ASSEMBLY

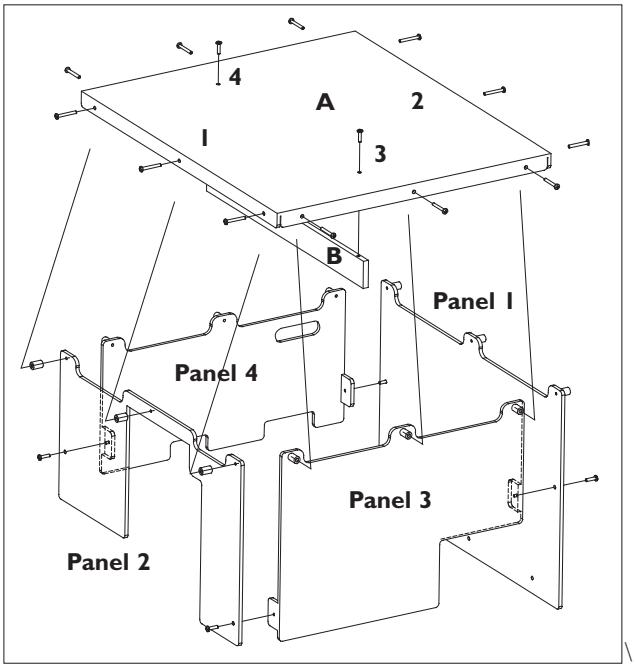


Fig. 39

1. Begin by attaching the PVC support (B) to the underside of the lid (A). Two supports have been provided and are labeled. One support will be for a 60hz power supply and one support will be for a 50hz power supply. Choose the support that is appropriate for your application. If you are unsure which power supply you have, refer to the specification plate on the motor.
2. Next, assemble the four vertical panels. The textured side of the panels will be facing out and each panel will be labeled on the inside face. Panels 1 and 2 have no tabs on the vertical edges while panels 3 and 4 do. Position the panels so that 1 is opposite 2 and 3 is opposite 4. Align the holes in panels 1 and 2 with the tabs of 3 and 4. Use the shorter screws to attach the 4 panels together (Fig 39).
3. The underside of the lid will have 1-4 engraved on each side. Line up the numbers on the underside of the lid with the corresponding vertical panel. Use the longer screws to attach the lid to the vertical face. Make sure that there is a cylindrical space between the lid and the vertical face at each screw.
4. If optional heater has been ordered then remove the mounting bracket and adhesive protective film of the heater controller keypad. Feed the keypad cord into the oval hole in panel 4. Press the keypad firmly against the panel. Feed the mounting bracket back over the keypad cord and tighten it against panel 4.
5. Once the Water Quality System is fully assembled, place the equipment hutch over the entire power unit so that the opening in panel 2 is seated around the power unit controller.
6. Align the 3 holes in the bottom of panel 1 with the holes in the water quality base. Use the short screws to attach the equipment hutch to the base (Fig 40).

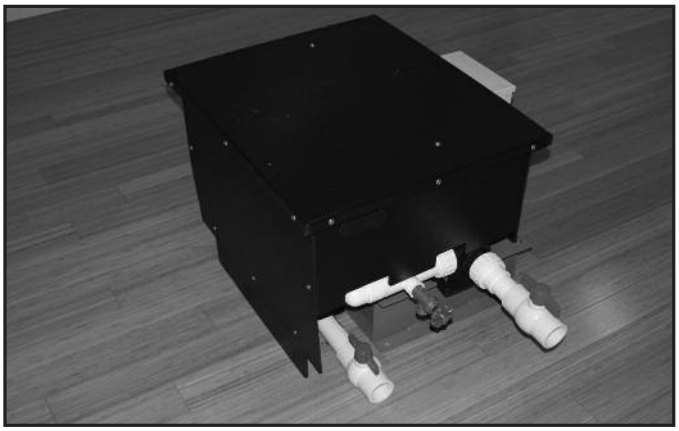


Fig. 34

INSTALLING AN ANTENNA EXTENSION

The Fastlane wireless controller transmits radio waves, similar to a garage door opener. Should the Hydraulic Power Unit (HPU) be placed too far away from the Fastlane Pool, the wireless controller may not be able to perform its functions. To operate the Fastlane more effectively, it may be helpful to install the antenna closer to the pool than the HPU, so there is less of a chance of interference occurring. A longer length of coaxial cable can be used if needed to move the antenna even closer to the pool.

Parts List
- Length of coaxial antenna cable
- Coaxial grounding block (antenna mount)

Instructions
- If the antenna is already installed, detach it from the upper left hand side of the Controller Box mounted on the HPU.
- Attach and finger-tighten the antenna cable.
- Attach the coaxial grounding block (antenna mount) within 25ft of the pool.
- The antenna can be placed even closer to the pool by purchasing antenna cable from a local supplier.
- Attach and finger-tighten the antenna to the upper end of the coaxial grounding block (antenna mount).

REMOTE CONTROL TRANSMITTER

The remote control transmitter has three buttons. Press and hold the On/Off button to turn the swim current on. Press and hold the Up or Down button to adjust the current to the desired speed. Press and hold the On/Off button while the current is on to turn off.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

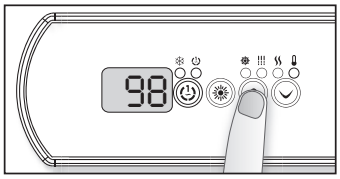
1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation. WARNING: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

INITIAL START UP

- Fill the pool to operating level (so that the top row of the honeycomb grill of the swim unit is just submerged).
- Close the ball valve on the pressure side of the pump.
- Open the hose spigot at the Water Quality System, allowing any air to bleed out of the system.
- Once you have a continuous flow of water, close the hose spigot and open the ball valve.
- Turn the power on to the system.
- If you have not purchased the heater-controller, then once the system is powered up the circulating pump will immediately start to operate.
- If you have purchased the optional heater-controller, it will go through a boot-up cycle when first powered up. This boot up cycle will take approximately 3-5 minutes. It is very important not to touch any buttons on the keypad during this boot up cycle.
- Once the boot up is complete, the keypad should display a constant temperature reading. If it is blinking FLO, then all of the air has not been bled out of the system. Turn the power off and repeat the above procedure until all air has been removed from the system.

KEYPAD FUNCTIONS

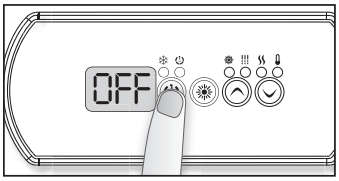
Up/Down Keys



Use Up or Down key to set desired water temperature. The temperature setting will be displayed for 5 seconds to confirm your new selection.

The "Set Point" icon indicates that the display shows the desired temperature, NOT the current water temperature!

Off Mode



This mode allows you to stop all outputs for 30 minutes to perform a quick spa maintenance.

Press and hold Key 1 key for 5 secs to activate the Off mode. Quick press Key 1 key to reactivate the system before the expiration of the 30-minute delay.

While the Off mode is engaged, the display will toggle between OFF and the water temperature.

MODEL: EP-1g - 230 VAC, 24 AMPS, 60/50 Hz.

IP25 RATED RAINPROOF (TYPE 3R) ENCLOSURE SUITABLE FOR INDOOR OR OUTDOOR USE

THIS UNIT REQUIRES 30 AMP 230 VOLT AC, SINGLE PHASE WITH NEUTRAL, 60/50 Hz. (THREE COPPER WIRES PLUS GROUND)

Hydraulic Power Unit
5 HP 21 FLA Amps 230 VAC 60/50 Hz
HEATER CONTROLLER (optional)
24 Amps 230 VAC 60/50 Hz

Controller
IMPORTANT SAFETY INSTRUCTIONS: Read and follow all instructions. To reduce the risk of injury, do not permit children to use this product unless supervised at all times. This control panel must be installed according to local electric code requirements. A GFCI (Ground Fault Circuit Interrupter) or RCD (Residual Current Device) circuit breaker must be used in the service panel and tested before each use in accordance with the manufacturer's instructions. The line in wire whip should be connected to a safety disconnect in sight of all equipment, but at least 5 feet away from the pool. This controller must be installed at least 5 feet away from the pool and all conductors must not share boxes, conduits or enclosures with non GFCI or RCD protected wiring. All wires must be copper. Box must be mounted with conduit down.

USING THE FASTLANE SWIM UNIT

Upon initial start up you will find that the unit has been set to its lowest speed; which is a barely perceptible current. You will need to increase the speed.

It is now acceptable to begin using the Fastlane Swim Unit. Remove and unwrap the two (one for use, one extra) wireless controllers from the Controller Box on the Hydraulic Power Unit (HPU). Press and hold the **ON/OFF** button to turn on the swim current.

Note: When the Fastlane is on, your keypad display will flash FLO (if optional 60Hz heater was ordered).

The Fastlane features 52 incremental steps in speed. Press and release the **FASTER** button to increase the speed of the current one step at a time. Alternatively, press and continue to hold the **FASTER** button to ramp up the speed until the button is released or the maximum speed is achieved. Reduce the speed in the same manner using the **SLOWER** button.

Turn off the Fastlane by again pressing the **ON/OFF** button. The Fastlane "remembers" its speed setting when it is turned off, so the unit will return to that same setting the next time it is used. NOTE: The receiver on the HPU is programmed to "ramp down" the speed of the current before completely shutting off. It will also "ramp up" the speed of the current when the unit is turned on.

The circuitry of the HPU is equipped with an automatic safety timer that will shut down the system thirty minutes after receiving its last command. If this happens in the middle of a swim, simply turn the unit on again and it will return to its previous setting.

CARING FOR THE FASTLANE POOL

Once installed, the Fastlane Pool will provide years of swimming, exercise, training, therapy and family fun with minimal maintenance required.

The Fastlane

- Clean the intake grill of the Fastlane Swim Unit of leaves as needed.
- Wipe down the stainless steel grab bar and cylindrical base with a Scotch Brite pad as needed.
- Clean the acrylic housing with any typical non-ammonia, non-abrasive kitchen cleanser and a soft sponge or cloth. **Do NOT use a Scotch Brite pad.**
- Periodically check all electrical and ground wire connections and test the GFCI/RCD circuit breaker for proper function.
- The hydraulic motor, which is located in the Swim Unit and submerged underwater, should be checked for wear at the end of each season. It is recommended that the motor be replaced after five years of usage, depending on water quality conditions.
- Change the hydraulic fluid and filter in the HPU after every 500 hours of use.

Pool Water Chemistry

- It is important for the long-term operation of the Fastlane that the pool water be properly balanced and in accordance with typical pool industry standards.
- As with any swimming pool, the Fastlane Pool requires water chemistry monitoring. The Water Quality System, which includes automated re-circulating, filtration, and optional heating will do most of the work on its own. However, balancing and maintaining the pool water is essential to the life and health of the equipment.
- **Maintain a minimal level (residual) of 0.5 ppm free chlorine in the pool at all times.** Adding 1/2 cup of Clorox a day will add approximately 0.5 ppm of free chlorine to a Fastlane Pool. How quickly that chlorine is consumed will depend upon the water temperature, swimmer load and the amount of direct sunlight the pool receives.
- Maintain a pH level between 7.4-7.8. A pH outside of this range will cause your water to be corrosive.
- Water test strips have been provided with the Fastlane Pool. The strips will help with monitoring the chlorine and pH requirements of the Fastlane Pool.
- **If the Fastlane Pool is located outside,** stabilized chlorine in granular form (should have an active ingredient of sodium dichlor) is recommended instead of Clorox.
- Pre-dissolve all dry chemicals before putting them into the pool. Failure to do so may result in bleaching or damaging the liner.
- Always have the pool's Water Quality System (the Swim Propulsion system is even better) running when adding chemicals, liquid or dry.
- Do not leave pool filled with water without proper chemical treatment and pool maintenance.
- **Under NO circumstances can salt-generating systems be used in an Endless Pool.**

Daily:

- Test for free chlorine a minimum of three times a week.
- Add chlorine to maintain free chlorine levels between 0.5 and 1.5 ppm.
- As one becomes familiar with the chlorine demand for the Fastlane Pool, the amount of chlorine needed to maintain the residual at a minimum level of 0.5 ppm will likely become second nature, and frequency of needing to test chlorine levels will likely decrease.

Weekly

- Check and adjust the water level. The water should just cover the honeycomb grill where the current is produced. Water levels greater than 1/2" lower than this can create a choppy current and may cause the skimmer to draw air into the plumbing lines. Having the water level 1" or more higher than that honeycomb grill can cause more water to splash out of the pool.
- Test the pH level at least twice a week. Broadcast (i.e. pour chemical into the current) pH increaser or pH decreaser to maintain levels between 7.4 and 7.8.

Nature 2 Installation

The Nature 2 purification system will be placed inside of the filter cartridge. A retention strap has been provided to prevent the Nature 2 (slotted yellow cartridge) from falling out of the filter.

Remove the Nature 2 and retention strap from its packaging. Pass the strap through the Nature 2 so that the locking mechanism of the strap is facing up.

Loop the strap over onto itself and interlock the strap end into its locking mechanism. The strap end should be inserted into the locking mechanism no more than 4-5 positions.

Next, pull the cylindrical floating cage out of the filter body. Remove the filter cartridge from the filter body inside the pool, by grabbing the top and unthreading the cartridge.

Insert the Nature 2 into the opening in the bottom of the cartridge so that the retention strap is facing down.

Reinstall the filter cartridge and then place the floating skimmer cage over top the cartridge.

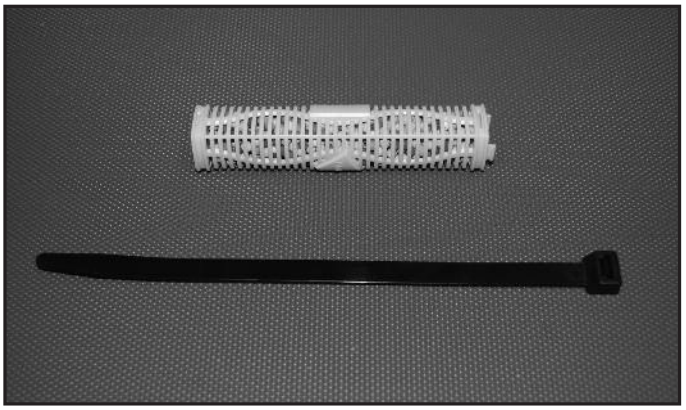


Fig 49

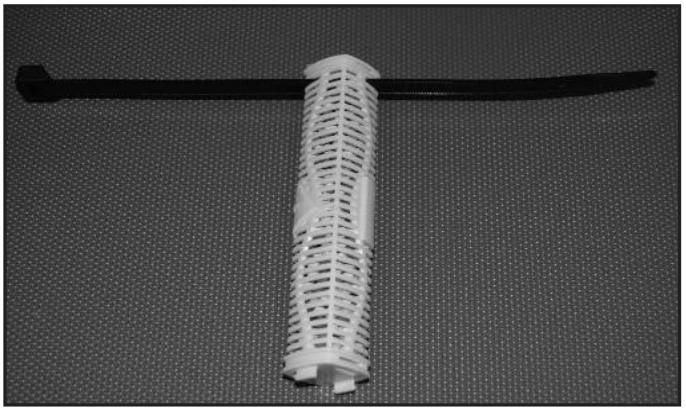
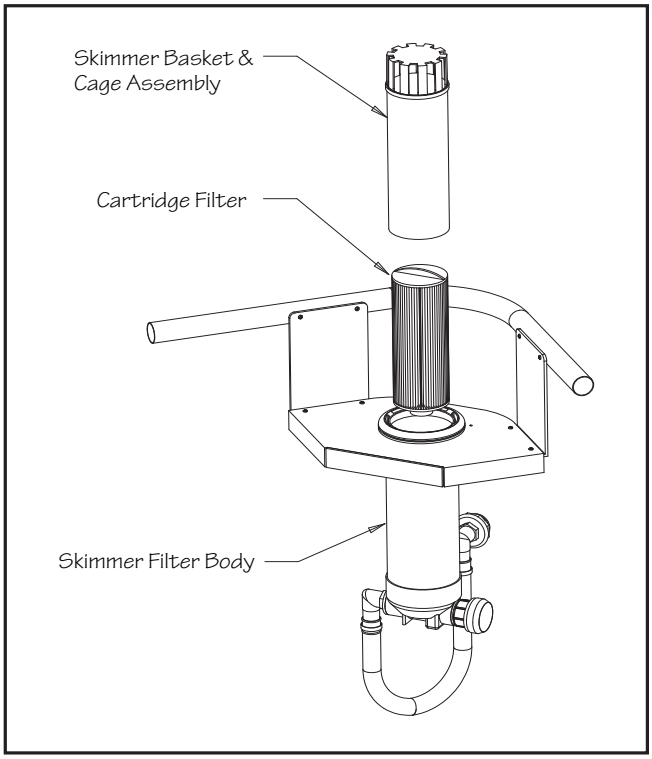


Fig 50

Fig 51

Filter Change



1. Turn the circulating pump off.
   - **For pools without the optional Electric Heater-Controller:** Turn the power off to the system at the circuit breaker or shut-off.
   - **For pools with the optional Electric Heater-Controller:** Press and hold the P1 button on the keypad (attached to the Equipment Hutch) until the keypad display reads, "OFF." It will take an additional few seconds for the pump to actually turn off. The pump will turn back on automatically after 30 minutes.
2. Once the circulating pump is off, pull out the internal skimmer basket and cage assembly.
   - Note: if there is debris inside the skimmer basket, then the cage can be disconnected from the cylinder by turning the cage a 1/4 turn counter-clockwise.
3. Reach inside the skimmer-filter body and unthread the filter and remove.
4. Clean the filter with a filter specific detergent or replace the filter as necessary.
5. Place the filter back into the body and thread into place.
6. Place the skimmer basket and cage assembly back into the body.
7. Turn the pump back on.
   - For pools without the optional Electric Heater-Controller: Turn the power back on to the system at the circuit breaker or shut-off.
   - For pools with the optional Electric Heater-Controller: Press the P1 button on the keypad (attached to the Equipment Hutch) once. This will turn the circulating pump back on.

Water Quality System

Filter

- If the pool has been contaminated with any debris during installation, it may be desirable to clean or exchange the cartridge filter at this time.
- Typically, the cartridge should be cleaned or replaced every 4 months or when a significant reduction of flow into the pool is noticed. If you have purchased the optional heater/controller, "FLO" will appear on your keypad when it is time toclean or change your filter..

Placarding the Fastlane Pool

Place the included eight no diving into pool/keep children supervised at all times stickers on all four sides of the pool, on the inside and outside top rail area of the liner, before using the Fastlane Pool.

NO DIVING into the Fastlane Pool.

Please keep children supervised at ALL times!

Endless Pools is an industry leader in customer service.

Please call the Endless Pools Customer Service Department at 1-800-910-2714 with any questions or inquiries regarding the Fastlane Pool.

Additional water quality and swimming products are always available at www.myendlesspools.com

Winterizing the Fastlane Pool

If the Fastlane Pool is to be taken apart:

1. Turn off the power at the circuit breaker
2. Disconnect and remove the Fastlane Unit from the pool
3. Disassemble the Fastlane Pool
4. Drain/blow out the water lines and the filtration equipment
5. Store the pool and equipment

If the Fastlane Pool is to be left together (i.e. the pool has a security cover):

1. Remove the skimmer (if the pool is equipped with a skim filter, remove the skimmer and housing, but leave the L-brackets attached to the rails)

2. Plug the suction and the return fitting using the 1-1/2” PVC plugs with o-rings originally sent with the pool (replacements are available through Endless Pools Customer Service)
3. Disconnect the PVC unions in the plumbing lines and drain/blow out these lines
4. Take the equipment inside, or otherwise drain/protect the equipment (an air conditioning cover would work well)
5. Add a winterizing kit (available from a local pool store) to the pool water
6. To cover the pool:

Option A: Leave the Retractable Security Cover open and purchase a winter cover from a local pool store. Place a cover pump on top of the winter cover along with water bags/weights.

Option B:
1) Float air pillows or inner tubes over the entire surface of the water and tie off as necessary

2) Close the Retractable Security Cover. Place a cover pump on top of the cover to remove any water that may accumulate

3) Monitor the amount of snow/water on top of the cover during the winter. Remove excessive snow and/or move the cover pump as necessary

Disassembling the Fastlane Pool

- Unhook the hydraulic hose connections at the Hydraulic Power Unit and cap all ends to prevent hydraulic fluid from draining.
- Pull the hydraulic hoses through the grommet holes (if applicable) and lift the Fastlane Swim Unit with hanger from the pool wall. Pull the Fastlane Swim Unit out of the pool carefully so as not to damage the pool liner fabric.
- Once the pool is drained, reach in each corner pocket and pull the liner away from the top rail tubes.
- Once the liner is loose from the top rail, walk around the outside perimeter of the pool moving the wall back and forth to loosen the top rail and corner pieces.
- Begin disassembling Fastlane Pool by removing the corners from the structure. Be very careful to slowly pull the corners from the top rails. Jolting or forcing the corner out of the top rail can create a tear in the corner of the liner.
- Once the corners are off, lift the top rails off of the struts and disassemble the remainder of the pool. Be sure the liner is clean and fully dry before storing.

TROUBLESHOOTING

Hr
An internal hardware error has been detected in in.xe. Contact Customer Service.

HL
The system has shut the heater down because the temperature at the heater has reached 119°F (48°C). Do not enter the water! Remove the spa cover and allow the water to cool down, then shut power off and power your spa up again to reset the system.

AOH
Temperature inside the spa skirt is too high, causing the internal temperature in the in.xe to increase above normal limits. Open skirt and wait until error clears.

FLO
The system does not detect any water flow while the primary pump is running. Check and open water valves. Check for water level. Clean filter. If the problem persists, call Customer Service

Prr
A problem is detected with the temperature probe.Call Customer Service.

OH
The water temperature in the spa has reached 108°F (42°C). Do not enter the water! Remove the spa cover and allow the water to cool down to a lower temperature. Call Customer Service if problem persists.

UPL
No low level configuration software has been installed into the system. Call Customer Service.

WATER TEMPERATURE

In a heating cycle, the system first generates water flow through the heater housing and the plumbing, in order to ensure accurate water temperature readings as well as avoiding heater activation in dry conditions.

After verifying pump activation and taking a water temperature reading if required, the system automatically turns the heater on to reach and maintain water temperature at Set Point.

The “Heater” indicator lights up when the heater is on. It flashes when there is a request for more heat but the heater has not yet started.

FASTLANE POOL™ LIMITED WARRANTY

ENDLESS POOLS, INC. WARRANTS TO THE ORIGINAL PURCHASER OF THE FASTLANE POOL MANUFACTURED BY US TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP UNDER NORMAL USE FOR TWO YEARS FROM PURCHASE.

Our obligation under the warranty shall be limited to the repair or exchange (at our option) of any part or parts which may thus prove defective under normal use within two years from date of purchase by the original purchaser, and which our examination shall disclose to our satisfaction to be thus defective. All labor costs for removal and re-installation of the defective part and all freight charges shall be paid by the purchaser and will not be reimbursed by Endless Pools, Inc. This warranty is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for use and of all other obligations or liabilities for all damages direct or consequential to person, property or business whether or not occasioned by our negligence, and we neither assume for us any other liability in connection with the sale of this Fastlane Pool.

IN ADDITION, ENDLESS POOLS, INC. OFFERS A TEN-YEAR STRUCTURAL WARRANTY ON THE POOL LINER AND METAL STRUCTURE FRAME. This structural warranty does not cover issues arising in whole or in part from: pools set up more than 3" out of level, acts of God including damage from weather conditions, plants or animals, odors, puncture, abrasion or cutting, aesthetic tears or rips, blemishes or non-structural defects. If a component should deteriorate beyond structural use in this ten-year period, we will repair or replace the component at our option after receipt and inspection of the defective part. The structural warranty is voided when suitable drainage is not provided, and/or parts are not properly bonded, as stipulated in the installation instructions.

THIS WARRANTY SHALL NOT APPLY TO THIS FASTLANE POOL OR ANY PART THEREOF, WHICH HAS BEEN SUBJECT TO ACCIDENT, NEGLIGENCE, FREEZING, IMPROPER INSTALLATION OR OPERATION, SALT CHLORINE GENERATORS, ALTERATION, ABUSE OR MISUSE. THIS INCLUDES, BUT IS NOT LIMITED TO, FLOW RESTRICTIONS OR OBSTRUCTIONS ON ALL WATER AND HYDRAULIC SYSTEMS AND NOT PROPERLY BONDING OR MAINTAINING PROPER WATER CHEMISTRY (pH level must be maintained between 7.4 and 7.8 and total alkalinity between 80 and 120 ppm. The total dissolved solids (TDS) must be no greater than 3,000 ppm). The term “original purchaser”, as used in this warranty, shall be deemed to mean the person for whom the Fastlane Pool was originally installed. This warranty shall apply only within the boundaries of the continental United States.

All orders are FOB Aston, PA. We will NOT be liable for any costs or losses due to changes in shipping schedules, or delivery times. It is the responsibility of the Customer to supply safe and proper site preparation, installation and operation for all Endless Pool Swimming Machines. This includes, but is not limited to, adequate drainage at any pool and/or equipment site, to control humidity, to post necessary safety signage and to ensure safe and proper use of all Endless Pool Swimming Machines. Customer shall be responsible for any and all building permits, fees, licenses, and authorizations necessary to comply with local building codes or requirements. Customer takes all responsibility for site preparation including, but not limited to, any slab or foundation. Any Endless Pools product installed above grade must be placed on a properly engineered structure, which is the responsibility of the customer.

We DO NOT warrant this machine to meet requirements of any safety code of any state, municipality, or other jurisdiction. Purchaser assumes all risk and liability whatsoever resulting from the use thereof.

In order to claim this warrant, original purchaser must promptly notify our Customer Service Department in writing of the existence of the claim and then follow our written instructions regarding the procedures for remedying the defect. Endless Pools, Inc. shall not be responsible for cartage, transportation, removal and/or reinstallation labor or any other such costs relating to performance of the warranty. In the event any portion of this warranty shall be deemed unenforceable by a court of law, the remainder of this warranty shall remain in full force and effect as if the voided portion were never included.

Prepaid returns of all Endless Pool products are accepted less a 10% restocking fee, up to 30 days from the date of purchase if undamaged and in its original shipping containers. Accessories, options and equipment that have been used are non-refundable. Before returning any product, you must call our Customer Service Department to receive proper return authorization.

Endless Pools, Inc., 1601 Dutton Mill Rd., Aston, PA 19014 800-910-2714

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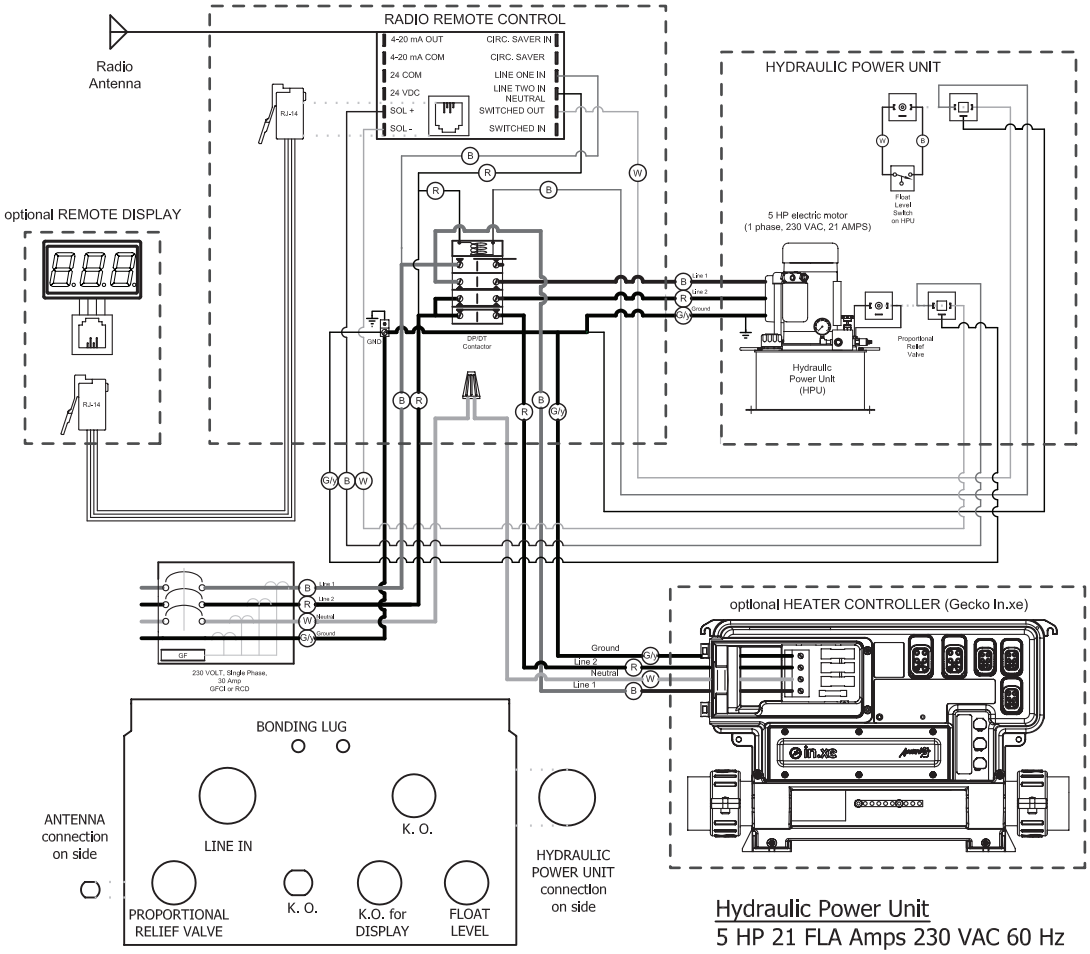
Wiring Schematic for 60hz Power Unit

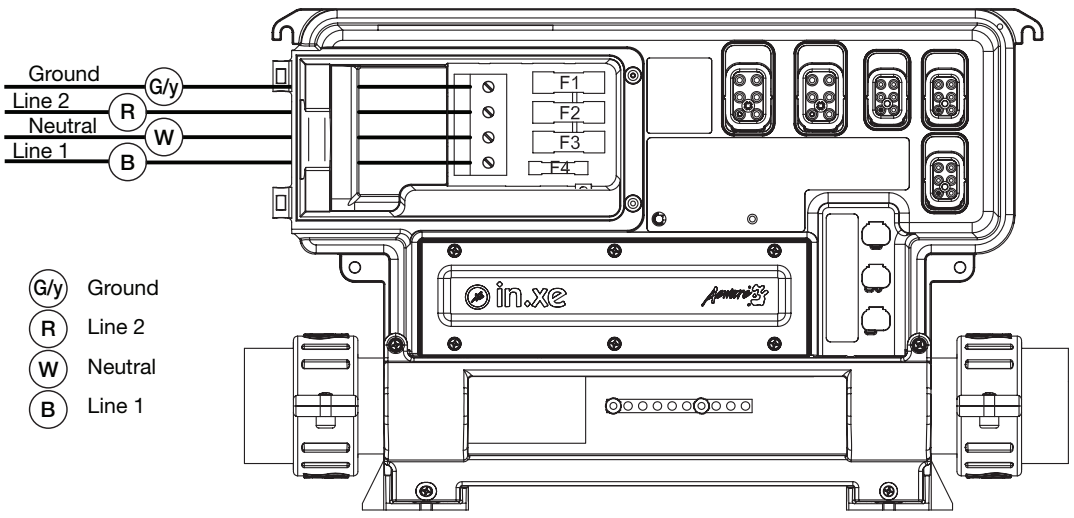
230v, 24 amp, single phase



Hydraulic Power Unit
5 HP 21 FLA Amps 230 VAC 60 Hz

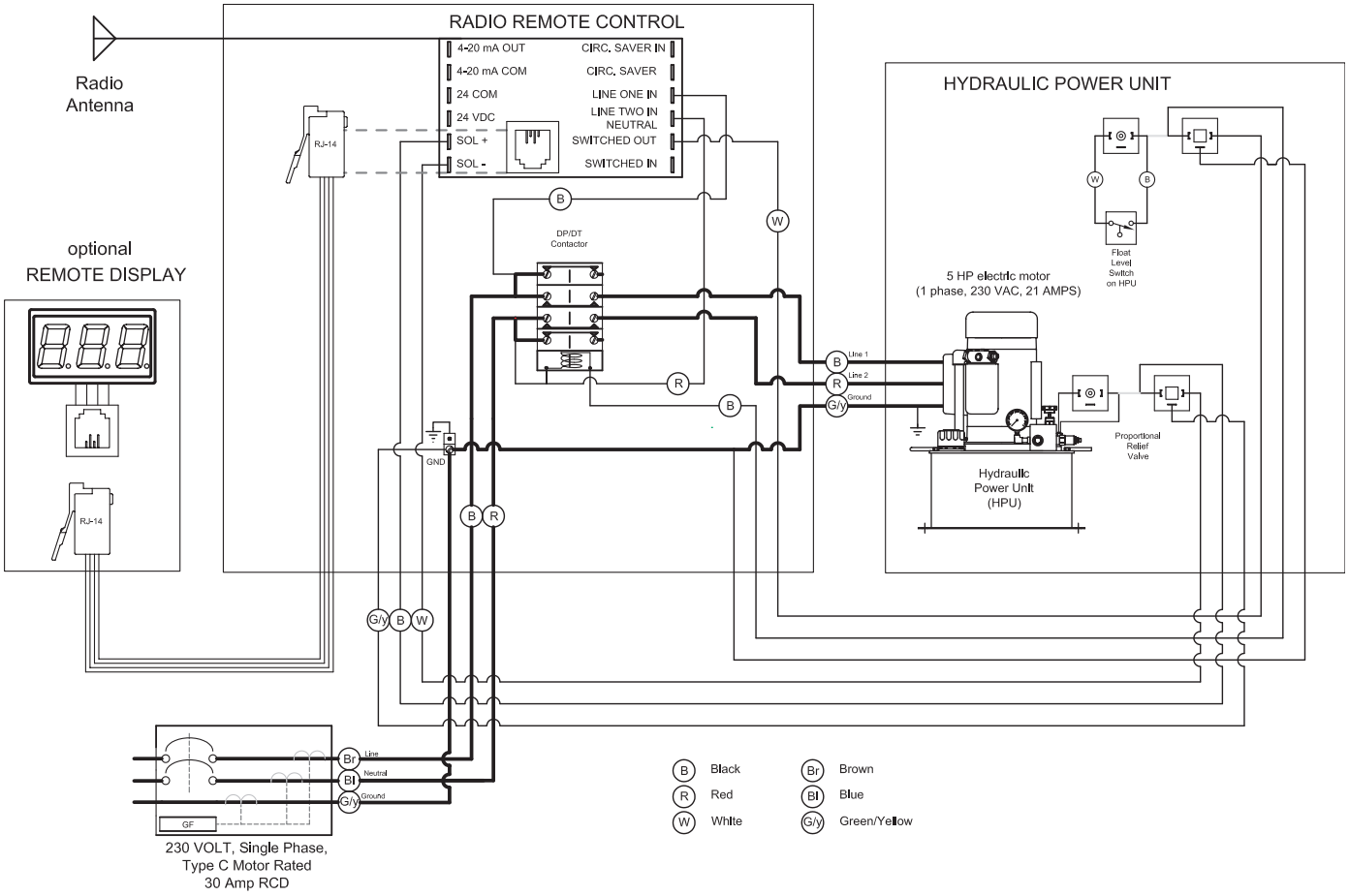
HEATER CONTROLLER (optional)
24 Amps 230 VAC 60 Hz

Wiring Schematic for 60hz Heater/Controller

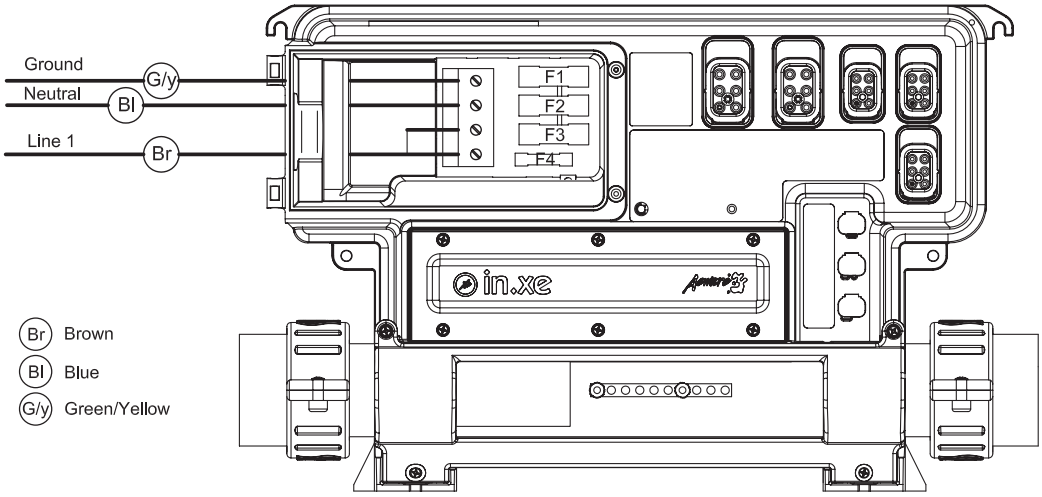


Wiring Schematic for 50hz Power Unit

220v, 30 amp, single phase



Wiring Schematic for 50hz Heater/Controller



HEATER CONTROLLER (Gecko in.xe)

ENDLESS POOLS®
SWIMMING MACHINES

Endless Pools, Inc. • 1601 Dutton Mill Rd • Aston, PA 19014-2931
800-910-2714 • 610-497-8693 fax • www.myendlesspool.com

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